

## University of Dundee

### The Evaluation of HMP Shotts' Oral Health Improvement Project

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# **The Evaluation of HMP Shotts' Oral Health Improvement Project**

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January 2012





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## Abbreviations

DHSRU	Dental Health Services Research Unit
FHPP	Framework for Health Promoting Prisons
FPHP	Framework for Promoting Health in the Scottish Prison Service
HI	Health Improvement
HP	Health Promotion
HPO	Health Promotion Officer
HWL	Healthy Working Lives
NIC	National Induction Centre
OH	Oral Health
OHP	Oral Health Promotion
OHRB	Oral Health-Related Behaviour
PDS	Prison Dental Service
PTI	Physical Training Instructor
SPS	Scottish Prison Service
Project	Oral Health Improvement Project
TR	Technical Report

# Executive Summary



## **Executive Summary**

### **Background**

The Oral Health Improvement Project (Project) was conducted from 2008 to 2011 in HMP Shotts, an Scottish Prison Service (SPS) prison for around 540 adult males. The NHS Lanarkshire - SPS collaborative project was delivered from the prison's health centre by a full time Health Promotion Officer (HPO) employed by NHS Lanarkshire. The aim of the Project was to change the knowledge, attitudes and behaviours of prisoners, their families, and prison staff through creating an environment supportive of health improvement.

### **Evaluation aims and objectives**

The aims of the evaluation were to assess the effectiveness of the Oral Health Improvement Project (Project) in achieving its declared purpose, and to make recommendations with regards to good practice and future directions. The specific objectives of the evaluation were:

1. To identify changes in oral health-related knowledge, attitudes and behaviours among participants.
2. To identify good practice within the Project.
3. To explore the challenges of working in a prison environment and the impact of the Project on the prison environment, structures and systems.
4. To make recommendations relevant to future health improvement activity within prison settings.

### **Methods**

The evaluation uses quantitative material from 107 questionnaires completed by prisoners, including 49 who acted as a control group, and 148 questionnaires administered by the HPO to prisoners in 2010; and qualitative material from interviews with 8 SPS and NHS Lanarkshire managers, focus groups with 20 prison-based staff, and focus groups with 14 prisoners. Data collection took place in Spring 2011 unless otherwise stated.

## **Results**

### **Objective 1: to identify changes in oral health-related knowledge, attitudes and behaviours.**

- (i) Prisoners' knowledge. Prisoners in the intervention group had better overall oral hygiene knowledge, particularly in relation to: reducing sugar consumption, regular tooth brushing, using fluoride toothpaste and mouthwash, getting a regular check-up, the risk of mouth cancer through smoking, and regular cleaning of dentures.
- (ii) Prisoners' attitudes. On a measure of dental neglect, the intervention group prisoners had less negative attitudes. Findings regarding change in knowledge and attitudes are supported by qualitative material.
- (iii) Prisoners' behaviour. Measures of oral health related behaviours (OHRB), including diet, smoking and oral hygiene, were not affected by the Project. Qualitative data indicate some individual behaviour change, and benefit to prisoners' families from work centred on visiting.
- (iv) Prisoners' reported oral health. Comparison of self-reported oral health problems indicates the 2011 intervention group had better oral health status than the 2010 control group. No clinical evidence is available to support this finding.
- (v) Impact on staff. Qualitative data suggest some staff gained knowledge and changed behaviour, particularly in relation to diet and aspects of the Healthy Working Lives initiative.

### **Objective 2: to identify good practice within the Project.**

- (i) The Project followed an evidence based approach in terms of its methods and the messages it attempted to get across: e.g. work with newly admitted prisoners follows NICE guidelines on behaviour change<sup>1</sup> which stress the opportunities presented at such transition points; Project messages included the use of fluoride toothpaste; risks relating to smoking and high sugar diets; the use of mouthwash and dental floss.
- (ii) The whole prison approach was felt to be important in building capacity and encouraging a supportive environment for oral health, and central to this process was the dissemination of information and health promotion events. Written material was well targeted and adapted to the prison environment, and events gave staff an opportunity to improve their health promotion knowledge and skills and engender a team approach.

**Objective 3: to explore [1] the challenges of working in a prison environment and [2] the impact of the Project on the prison environment, structures and systems.**

1. Challenges:

- (i) The nature of the prison population, with poor education, diet, knowledge, health and health behaviour (tobacco, drug and alcohol misuse) being endemic prior to committal.
- (ii) Attitudes toward oral health (OH) improvement and an emphasis on access to treatment over self-directed prevention. There was consensus among prisoners, staff and managers that inadequate access to dental treatment undermined the Project's impact.
- (iii) Resistance among some staff to support the Project's initiatives, whether prisoner or staff focussed. Health promotion was poorly understood and given low priority by some staff, although evidence emerged that some progress was made in this respect.
- (iv) More general restrictions due to security demands and resources made available to the HPO within the prison.

2. Impact on the prison setting:

Qualitative material emphasised the value of the focus on oral health improvement that the full-time HPO appointment brought, the work with the catering management to promote more informed diet choices, the oral health element brought to health improvement (HI) and Healthy Working Lives (HWL) events for prisoners and staff, and involvement in prisoner visits and induction. The Project gave an impetus to effective interagency working despite internal pressures on the prison management.

**Objective 4: recommendations**

- 1. Develop information flow strategies to sustain evidence-based oral health knowledge, and tailor messages and choice of settings to maximise the chance of behaviour change.
- 2. Explore reasons for poor adherence with behaviour change, and consider behavioural interventions such as motivational interviewing and prisoner mentor roles.
- 3. Offer prison staff HI training to give them skills to tailor health interventions. Such training should be both in-service and part of the initial vocational training curriculum.
- 4. Provide staff with evidence-based and appropriate oral health information and accurate information on access to services (e.g. waiting times for treatment).

5. Use up-to-date evidence and guidance on the delivery of health improvement in prison settings to support a sustainable and supportive environment for oral health in HMP Shotts.
6. Actively involve staff (including catering, visits and induction specialists) in the development and management of health improvements initiatives.
7. Develop closer links between the dental team and the Project, and make explicit the potential for decreasing pressure on dental treatment service by promoting oral health.
8. Developments in a prisoner-mentor role within Halls should be made in order to increase the likelihood of behaviour change.
9. Raise the profile of the oral health of prisoners and staff within the wider prison management structure.
10. Draw from examples of good practice over the three years of the Project to promote a sustainable, supportive environment for oral health in HMP Shotts.
11. Strengthen dual management arrangements in agenda setting and monitoring to sustain oral health improvement in the prison setting.
12. Initiate work to map out a wider health promotion programme within the prison, of which oral health would continue to represent a major strand.



# 1. Introduction

## **1.1 Health improvement in prisons: the Scottish context**

Since the publication of the oral health survey in Scottish prisons in 2002<sup>2</sup> a number of national health directives have identified prisoners as a priority group for oral health improvement.<sup>3, 4</sup> Despite this focus on reducing oral health inequalities there remains little information in the current literature on the nature or effectiveness of health improvement programmes within prison settings. However, difficulties in developing and evaluating health improvement initiatives and in conducting research in the prisons are readily acknowledged. These difficulties include security and safety restrictions, outdated infrastructure, and inadequate staff availability.<sup>5</sup> Notwithstanding such difficulties, robust evidence is key to translating health improvement programmes into economic benefits and cost-effective health gains.<sup>6</sup>

In Scottish prisons, efforts to promote health and wellbeing are currently guided by the principles outlined in the 'Framework for Promoting Health in the Scottish Prison Service' (FPHP).<sup>7</sup> This framework is underpinned by a 'whole prison' or 'health settings' approach.<sup>7, 8</sup> an approach adopted by the Oral Health Improvement Project (Project) that is the subject of this evaluation report.

## **1.2 Overview of HMP Shotts**

HMP Shotts is a maximum security prison for long-term adult male prisoners run by the Scottish Prison Service (SPS). It has an operational capacity of approximately 540 prisoners, all in single cells. Prisoners are housed across 3 residential halls (B, C, and D), an Independent Living Unit, a segregation unit, and two national facilities: National Induction Centre (NIC) and Kerr House.<sup>9</sup>

During 2011, staff and prisoners in HMP Shotts began moving into a new adjacent facility. However during the period of the evaluation all prisoners and healthcare staff were still housed on the old establishment.

## **1.3 Overview of the Oral Health Improvement Project**

In 2008 NHS Lanarkshire and HMP Shotts initiated an Oral Health Improvement Project in HMP Shotts. The Project followed a whole-settings approach to promote an environment

supportive of oral health and wellbeing. To achieve this goal, one full time Health Promotion Officer (HPO) was appointed to work in partnership with NHS Lanarkshire's health improvement department and SPS staff whilst based in HMP Shotts health centre.

The purpose of the HMP Shotts Oral Health Improvement Project was to change knowledge, attitudes and behaviours of prisoners, their families, and prison staff through creating an environment supportive of health improvement. The Project activities were delivered in accordance with the four key principles outlined in the FPHP:

**Empowerment:** supporting individuals to take control of factors which affect their oral health. The Project sought to create opportunities to support and encourage prisoners, visiting families and prison staff to take responsibility for their oral health by increasing their ability to make informed choices.

**Partnership:** developing effective collaborative and co-ordinated programmes. The Project aimed to establish and develop partnerships between NHS Lanarkshire, SPS staff and staff from outside organisations in various prison settings.

**Sustainability:** engagement across the prison establishment, ensuring integration within structures and systems. As it evolved the Project developed multiple components which sought to make changes through integration within prison structures and systems.

**Equity:** fair and impartial healthcare provision. The Project sought to improve access to dental healthcare services for all prisoners through the development of best practices and improved understanding of the prison dental service referral system by service referrers (prison staff), providers (dentists) and users (prisoners).





## 2. Evaluation

## 2.1 Evaluation aims and objectives

The aims of the evaluation were to assess the effectiveness of the Oral Health Improvement Project in achieving its declared purpose, and to make recommendations with regards to good practice and future directions. The specific objectives of the evaluation were:

1. To identify changes in oral health-related knowledge, attitudes and behaviours among participants.
2. To identify good practice within the Project.
3. To explore the challenges of working in a prison environment and the impact of the Project on the prison environment, structures and systems.
4. To make recommendations relevant to future health improvement activity within prison settings.

## 2.2 Methodology

The evaluation of the Project used material from the following sources:

- (i) DHSRU questionnaires completed by NIC and D Hall prisoners in March 2011.
- (ii) Oral health-related questionnaires administered by the project HPO to prisoners in 2010, which had some common content with the 2011 DHSRU questionnaire.
- (iii) One-to-one interviews with SPS and NHS Lanarkshire managers, together with their responses to the Nuffield Partnership Questionnaire on inter-agency collaboration<sup>10</sup>, completed in March and April 2011.
- (iv) Focus groups with 20 Prison Officers and prison-based staff, including the current dental team, completed during March and April 2011.
- (v) Focus groups with 14 prisoners who had come into contact with the Project, completed during March and April 2011.

Where identical questions appeared in the two questionnaires, comparisons were drawn between the 2010 results and the findings from the DHSRU survey administered in 2011.

**Table I      Methodology Overview**

<b>Data collection instrument (Technical Report No.)</b>	<b>Participants (n)</b>	<b>Location (n)</b>
DHSRU Oral health-related Questionnaire (1)	Prisoners (107)	National Induction Centre (58) Residential Hall D (49)
Prisoner focus groups (2)	Prisoners (14)	Various areas of HMP Shotts (14)
Staff focus groups (3)	Prison Officers and staff, healthcare staff and prison dental team (20)	HMP Shotts (20)
One-to-one staff interviews (4)	Project Board and senior staff (8)	HMP Shotts (4) NHS Lanarkshire (4)
Nuffield Partnership Questionnaire (5)	Project Board and senior staff (8)	HMP Shotts (4) NHS Lanarkshire (4)

The two surveys conducted with prisoners in 2010 and 2011 required a pragmatic approach. For the 2010 survey, the HPO administered the questionnaire to prisoners individually. In 2011, questionnaires were administered to groups of prisoners in a classroom setting, under the guidance of the evaluator, and without any SPS staff presence. Prisoners were given an explanation of the aim of the survey and their rights regarding their participation. Written consent for participation was sought at this point, and while no prisoner refused, it was not possible to calculate a response rate (ratio of prisoners approached vs. participating in the survey) as there was no record of the number who may have declined participation at an earlier stage. The survey participants therefore constitute convenience samples.

In both surveys, data were collected from two groups of prisoners – those who had had contact with the HPO (intervention group), and those that had not (control group). However the use of these terms implies a clear distinction between the two groups. While the HPO was actively and intensively involved in the NIC in 2010, some of these prisoners may have left the NIC by the time of the follow-up survey in March 2011. In addition, prisoners from D Hall (control group) may have had some exposure to the project, for example through changes to the prison menu or through posters. This was unavoidable given the Project's 'whole prison' approach. Secondly, it was not possible to identify

whether any of the prisoners completed the baseline and follow-up surveys. As a result, responses from individual prisoners could not be compared over time. Thirdly, all the data collected is based on prisoner self-report rather than observed behaviour, for example with respect to their diet, oral hygiene, or state of dentition.

Participants in focus groups (both prisoners and staff) were likewise selected because of their familiarity and collaboration with the Project. While this ensured that contributions were well informed and experience-based, the evaluation team are aware that any views, including negative ones, held by prisoners and staff who did not take advantage of the opportunity to be involved in the Project, are not well represented in this report. Efforts have been made to compensate for this limitation by asking prisoners and staff for their views of any shortfalls of the Project including its aims, delivery and sustainability. No SPS staff were present in prisoner focus groups, and no SPS managers were present in staff focus groups.

As far as possible, direct quotes from prisoners and staff are used to illustrate themes and issues. However quotes which permit the identification of the participant have been omitted or edited as far as possible. This particularly applies to SPS and other staff in specialist roles (e.g. induction, catering, smoking cessation service) and to managers interviewed on a one-to-one basis.

## **2.3 Ethical considerations**

This evaluation was considered a service evaluation and therefore not subject to NHS ethical approval in accordance with the published guidelines.<sup>11</sup> However, given the nature of the data to be collected and the intention to publish the findings, a 'grey route' application was submitted to West of Scotland Research Ethics Committee. A favourable ethical opinion was received on the 21<sup>st</sup> January 2011. Ethical approval was subsequently obtained from the SPS Research Ethics Committee on the 9<sup>th</sup> February 2011. Information sheets for prisoners and staff about the evaluation, and where applicable the evaluation questionnaires, focus groups and interviews were provided. Informed consent was sought from all participants prior to taking part in the evaluation study and all data collected was anonymised.

### **3. Evaluation objective 1**

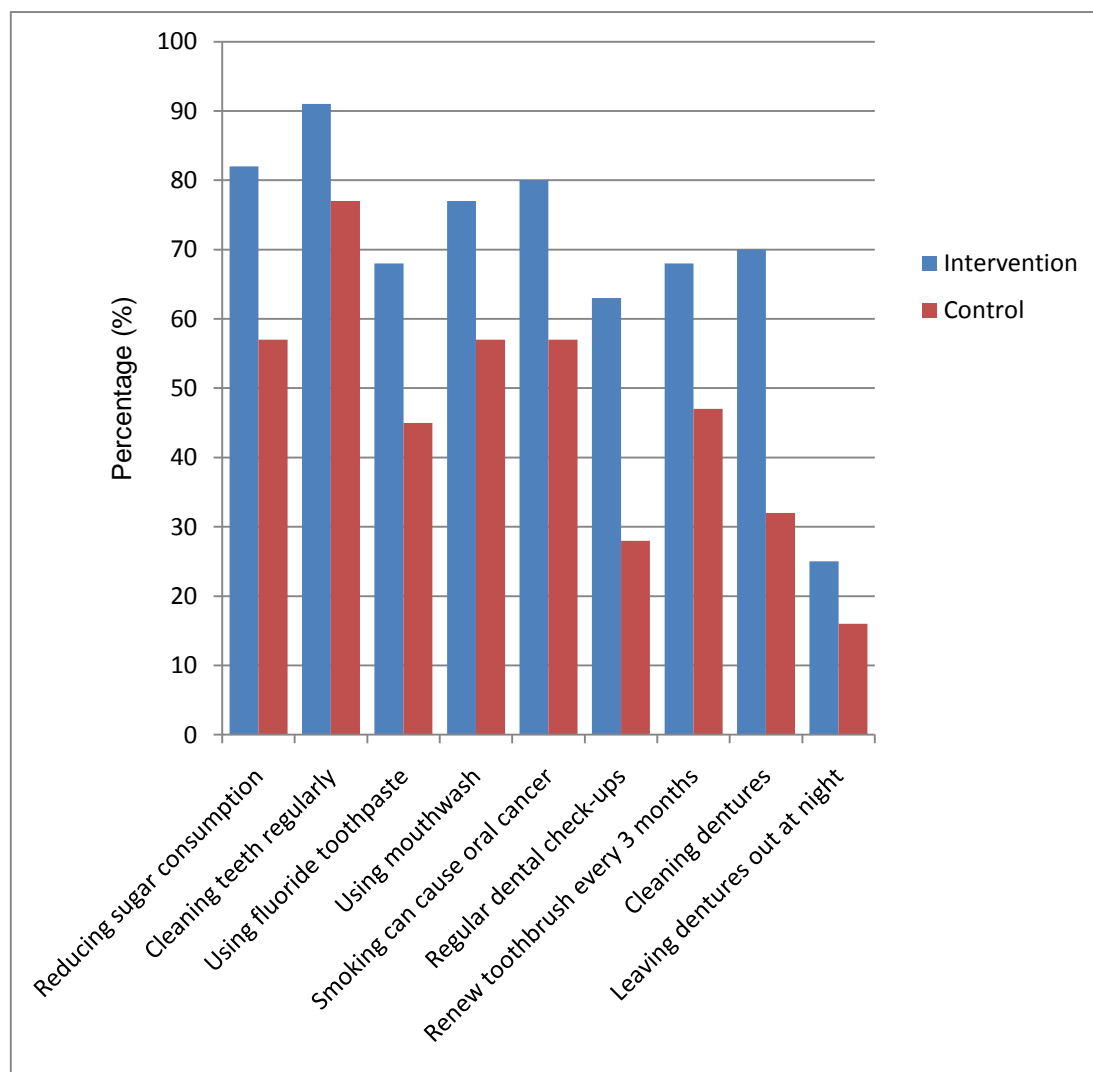
To identify changes in oral health-related knowledge, attitudes and behaviours among participants

This chapter draws on material from questionnaire surveys conducted in 2010 by the HPO and in 2011 by the evaluation team. Responses are compared between intervention and control groups. This material is complemented by qualitative material from prisoners, staff and managers.

### 3.1 Prisoners' oral health-related knowledge

In the 2011 survey prisoners were asked: 'Since you've been in Shotts prison, which of these messages about looking after your teeth and mouth have you heard about?' followed by a list of nine OH messages (Figure 1). Significantly larger proportions of prisoners in the intervention group knew about reducing sugar consumption for oral health, regular toothbrushing, using fluoride toothpaste and mouthwash, getting a regular check-up, the risk of mouth cancer through smoking, and regular cleaning of dentures (TRI, Table 1.4).

**Figure 1 Prisoners' awareness of oral health messages, 2011**

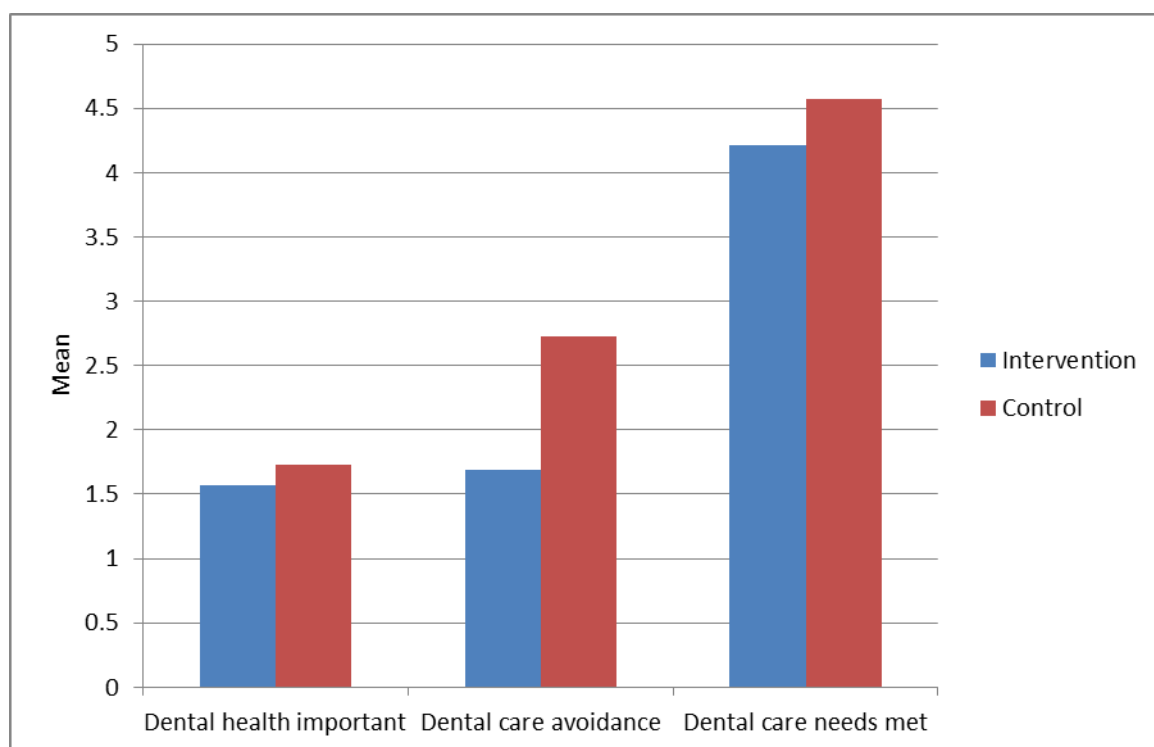


A total knowledge score was calculated from these responses (range 0 – 9), with a higher score denoting greater knowledge. Prisoners in the intervention group had a higher mean score on this measure (5.62 [SD 2.45]) compared to 3.87 [SD 2.46] in the control group ( $t=3.53$ ;  $P=0.001$ ).

### 3.2 Prisoners' oral health-related attitudes

Prisoners' oral health related attitudes were assessed using three attitudinal questions from the Dental Neglect Scale developed by Thomson and Locker.<sup>12</sup> These questions use a 5-point Likert format ranging from 'definitely no' to 'definitely yes'. Higher scores represent higher dental neglect.

**Figure 2 Prisoners' oral health-related attitudes, 2011**



The combined mean of the three scores was calculated for the two groups. There was a statistically significant difference between intervention group mean (2.53 [SD 0.63]) and control group mean (2.81 [SD 0.67]) ( $t=2.05$ ;  $P=0.05$ ). See TRI, Table I.5.

The findings regarding change in knowledge and attitudes have some support from qualitative material. Some prisoners who took part in the focus groups were able to



demonstrate knowledge across a range of oral health-related topics including the role of diet, toothbrushing, and the importance of fluoride for oral health as well as knowing about the link between smoking and oral health, the role of the dentist, and the importance of using mouthwash to prevent oral diseases.

‘She told us a number (fluoride strength) you know, that was good and I think Colgate is good and the actual jail one seemingly is alright but, it’s a horrible ... just tastes ... you know.’

‘(you’re) meant to brush your tooth for a couple of minutes at least. Aye, just recently found out that you’re not meant to use a hard toothbrush, meant to be soft.’

‘... not to brush your teeth after you’ve just ate.’

‘She’s maybe made the guys a wee bit more aware you know. I wouldnae say dramatically but, a wee bit, a wee bit jus a wee bit but, you know.’

Prisoners in focus groups were generally aware of the impact of food sugar content, fluoride, and smoking on oral health.

The oral health-related knowledge change indicated by prisoner questionnaire responses is supported by themes emerging from staff focus groups and interviews with managers (TR3, TR4). The most commonly cited theme from staff in this respect was that the Project had increased prisoner (as well as staff) awareness.

‘I think prisoners have been really interested in, probably a lot that she has told and that the prisoners have learnt things they didn’t know beforehand - just by talking to her. I think prisoners have learned quite a bit from her.’

However several staff participants pointed out the challenges in working with a prison population, and the need for sustained input.

‘We have a never ending, you know, chain of guys coming through here who access the service. If that gets forgotten about - you know, the promotional side of the health issues, you know, oral hygiene, whatever it may be, diet, that kinda stuff - the minute that gets forgotten about, wi these guys, they’ll forget about it, you know. They all go back to, just being easy, what’s easiest for them is to get up and have a, you know, buy their rubbish.’

**We conclude that prisoners exposed to the Project were more aware of key messages than those who had not had such exposure, and were less likely to display attitudes reflecting dental neglect.**

### **3.3 Prisoners’ oral health-related behaviours**

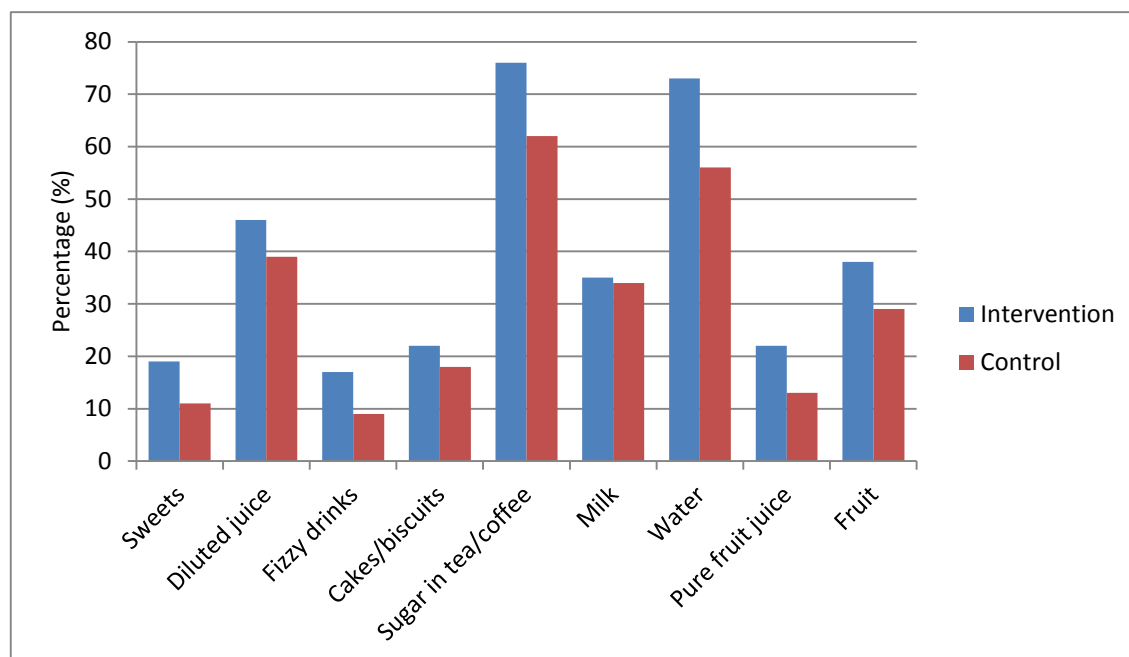
#### **a. Toothbrushing**

Seventy-seven per cent (44) of the intervention group and 72 per cent (34) of the control group reported brushing at least twice a day. There was no statistically significant difference between intervention and control groups in frequency of toothbrushing either in 2011 ( $\chi^2=7.11$ ,  $df=5$ ,  $P=0.21$ ) or in 2010 ( $\chi^2=4.23$ ,  $df=5$ ,  $P=0.52$ ).

#### **b. Diet**

Figure 3 shows consumption of healthy and unhealthy diet components on at least a daily basis. There were no statistically significant differences either for individual items or for a total score based on frequency of consumption of each item, with a range of 9 (unhealthy diet) to 54 (healthy diet). The intervention group mean score was 29.07 [SD 6.83], compared with a control group mean of 30.53 [SD 6.83] ( $t=-0.94$ ;  $P=0.35$ ). The equivalent scores in 2010 were 28.21 [SD 5.64] and 28.45 [SD 5.97] respectively, and no between-group differences were found when the four group means were compared ( $F=1.29$ ,  $df=3$ ,  $P=0.28$ ).

**Figure 3 Consumption of diet components on at least a daily basis, 2011**

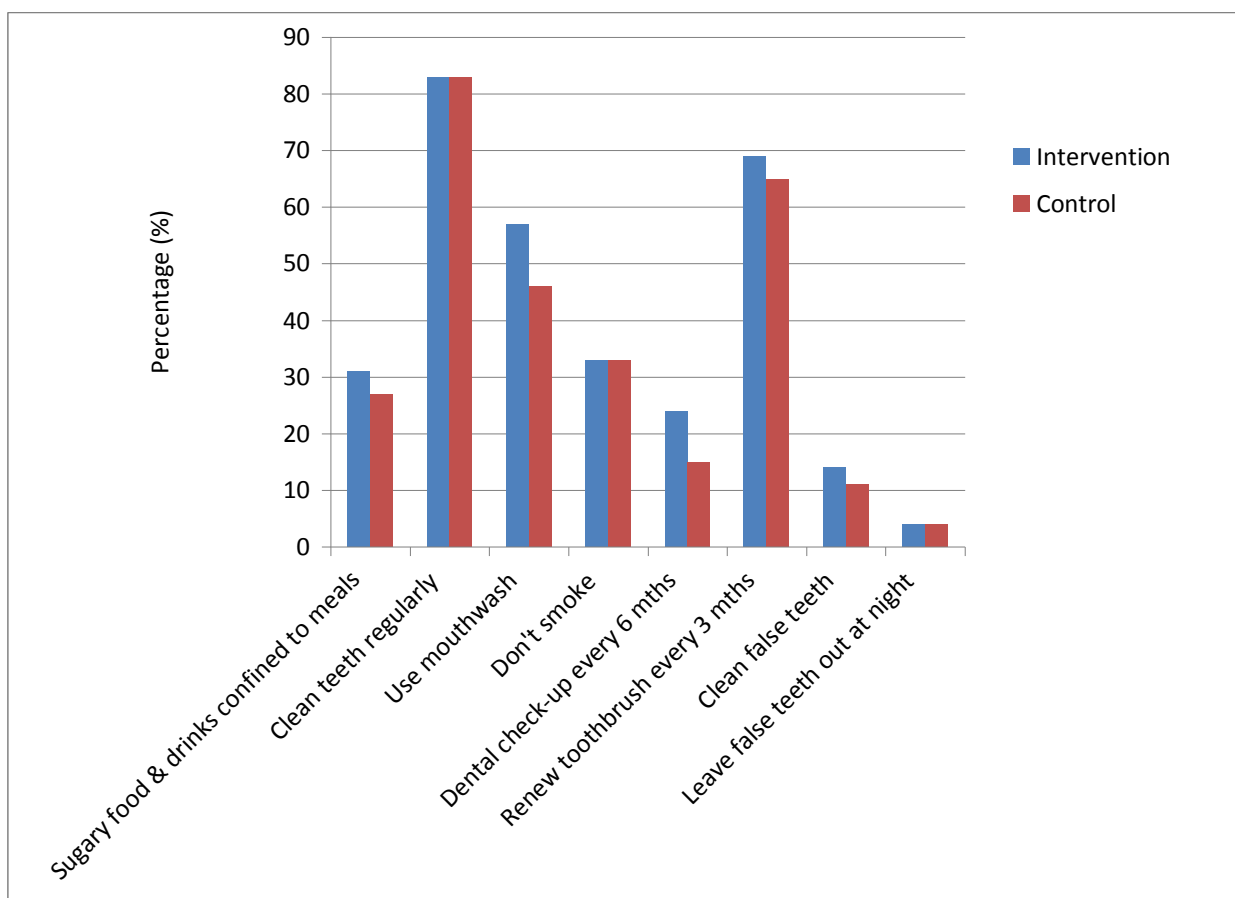


### **c. Oral health-related behaviours**

Figure 4 shows reported oral health-related behaviours. A count of positive responses to the eight behaviours showed no significant difference between the two groups (intervention mean=3.29 [SD 1.41]; control mean=3.00 [SD 1.64];  $t=0.98$ ;  $P=0.33$ ). The mean number of cigarettes smoked (including both smokers and non-smokers) was 8.59 [SD 10.83] for the intervention group and 10.83 [SD 10.96] for the control group. This difference is not statistically significant ( $t=1.04$ ;  $P=0.30$ ).

Comparison of 2011 and 2010 data does not indicate increased adoption of these behaviours in response to exposure to the Project over time, with the possible exception of reported use of mouthwash, which was higher in the intervention groups in both 2011 and 2010. The mean of all behaviours was calculated and compared across the four groups. No significant differences were identified (ANOVA:  $F=2.01$ ,  $df=3$ ,  $P=0.11$ ).

**Figure 4 Prisoners' oral health related behaviours, 2011**



However there is strong qualitative evidence of behaviour change. For instance one staff member commented:

‘There’s more guys buy fruit and ‘veg’ in here than ever before and that’s a, that’s a dietary input on the healthy stuff that, you know, that she’s been looking at as well so, that’s had a big impact.’

A prisoner reported he had changed his toothbrushing regime.

‘Aye, just recently found out that you’re not meant to use a hard toothbrush meant to be soft. I’ve always used hard toothbrushes - oh I got one fae (the HPO) before on a health day and eh - it was a good soft one you know. So I think I’ve been messin’ my teeth up for years wi’ hard toothbrushes’

Comments from managers in the main support this positive view of the Project's impact, while recognising the difficulty of quantifying change.

'The Project has undoubtedly impacted on people you know and I am not measuring that - that is quite difficult but when you start to look at all the behavioural aspects and things like that and the feedback from people, you just have to see something is getting clearer.'

'I think backing up (smoking cessation and patches) with (the Project) – showing them some of the risks, that's a positive aspect, joining the two services up.'

'They're very much set in their ways ...all the kind of things we love but are not good for us like chips and sweets and fizzy juice. It's hard to break the culture and bear in mind as well that a lot of cultural aspects of living in a prison as a prisoner involve those kind of commodities as (barter)... as you may well pay off a debt with a bottle of fizzy juice or a Mars Bar... if you try and permeate through that culture it's difficult.'

However prisoners, staff and managers recognised that improved access to the dental service and Project initiatives were intertwined.

'It's all very well you telling me these lovely messages but I cannae get to the dentist so, why should I bother?'

'We need a model with more than one aspect because just having dental treatment does not work if you don't; if you get your teeth fix and go away and still drink fizzy juice and eat Mars Bars and never brush your teeth then what's the point because you are gonna be back there again in two months you know with another bad tooth.'

**We conclude that while there is no quantitative evidence that the Project had any impact on reported oral health-related behaviours (including diet), prisoners, staff and managers voiced positive views on the impact of the Project on individual behaviour.**

### 3.4 Visiting families and their oral health-related knowledge, attitudes and behaviours

It was not possible to obtain information directly from visiting families within the scope of this evaluation. However SPS staff participated in focus groups and interviews were able to provide some qualitative evidence on the Project's impact on families (TR3). Staff reported that the father-child oral health improvement intervention enabled messages to be cascaded out to families. It was also felt that this work may improve the father-child bond, which was seen positively by prisoners and staff.

'She's been up, sitting in the visits, and having chat with them and showing them different bits and pieces. Stuff that was more geared toward the kids but allowed them (prisoners), you know, to have an input in it. The guys have really enjoyed that, and that's obviously where the calendar came from ... this makes a huge difference cause these guys feel as if their actually doing something for their family and for their kids outside. So that, that's been a good setting to be able to go up and, kinda tie in, obviously a community thing with obviously the guys who are in prison, so aye that's been, been well received.'

Managers were also highly supportive of this approach.

'I think it's a clever approach... whilst their father as parent educator is involved in the process, he must be observing some of this message themselves as well you know. It's good to tell my son and daughter this therefore it must be a good thing, you know. Because it must be hard sometimes with distance from your family to comfortably engage in a meaningful conversation.'

'His family is the most important thing in his life and they like the idea of that ... there has been fruit, posters and coasters and information leaflets because I think they see that as a chance to say (to their kids) I am telling how you how to eat, how to look after your dental hygiene.'

'To get a father something back to say to his kids to say this will help you, that's an overarching thing that I would say what worked best.'

### 3.5 Prison staff's oral health-related knowledge

Despite the challenges in staff-engagement during implementation of the Project, staff responses (TR3) showed the majority of staff interviewed were aware of the Project and accessed the interventions delivered. Moreover, it emerged that future initiatives, particularly where resources for staff were to be incorporated, would be welcomed. Staff generally felt that they had learned from the oral health interventions both specifically targeted toward them and those primarily developed and targeted toward prisoners.

Although the qualitative evaluation did not specifically seek to demonstrate oral health-related knowledge, staff were forthcoming with examples of their knowledge of various oral health topics including the impact of diet, the role of sugar in tooth decay, toothbrushing routines, and fluoride content of toothpaste. One member of staff was able to state prisoners' experience of tooth decay was linked to drug use and methadone treatment, due to dry mouth and therefore increased risk of dental caries.

Staff also acknowledged that the Project had successfully raised awareness of other more general health-related issues such as alcohol and hypertension through the co-ordination of health and wellbeing events:

‘Actually learned myself other than prisoners as well ... realised I had high blood pressure myself and before I knew where I was, I’m in the treatment room.’

‘... getting involved with staff and making us aware and we’ve ended up with people who have might not have known they have an underlying problem who have suddenly been made aware. In that what she’s said there, I’m going to see my GP. I don’t know if that has been related into prisoners who have also done similar but I would suggest it would be the case because prisoners usually are the first to click on to say “Aw I’m feeling like that, I’m going to see the doctor now” and wee bits and pieces like that “Aw I’m going to see someone about smoking cause I want to stop smoking.” Now I know about the processes, now I know about my lung. So there is all that. Education can’t go wrong at the end of the day.’

### **3.6 Prison staff's oral health-related attitudes**

The qualitative evaluation provides evidence of a positive attitude from prison staff towards the Project, and recognition that the Project had the capacity to improve oral health-related knowledge, attitudes and behaviours in prisoners, visiting families and staff.

'I can actually say hand on heart right now that for the staff and prisoners both at Shotts there has been a benefit. It's whether we can maintain that benefit all the way through. If they can do it through the whole prison service I think there is a saving at the end of it which is people's health – THE most important. Secondly – is monetary, because you won't be getting these people that are ill.'

Staff were appreciative of the fact that some Project resources had been allocated to them since previous initiatives had solely focussed on prisoners. Where challenges were discussed, staff reluctance to engage with the Project from the beginning was acknowledged.

'I would not have thought anyone was going to staff health promotion days but there were loads at lunchtime and it was fruit laid on and there was screening for your cholesterol, a massage, it was great. It was great for the staff to get something back ... and see to have that simple thing for the staff was great.'

### **3.7 Prison staff's oral health-related behaviours**

The focus groups also provide some evidence of behaviour change among prison staff. One staff member reported he was attending for a dental treatment for the first time in two years. Another talked about the impact on his family:

'I've got two young kids now, so, I'm trying to encourage them to go so that's, that's my big thing as well, got the family.'

Another felt fruit provided was a resource frequently accessed by staff who would otherwise have not consumed fruit. In an environment where staff have limited access to healthy food this initiative was particularly appreciated:



‘You have never seen so many staff eat fruit you know and even she said that, she said, you know, why don’t you go and buy it if you can get it for free and most of it was - I can’t be bothered, you know, but if it’s put there it shows that they will eat it and I think the staff was kind of grateful that she was doing stuff with us as well.’

Similarly the prison staff were appreciative of the input from the HPO in the smoking cessation group where both staff and prisoners had successfully quit smoking:

‘Obviously I don’t smoke and I don’t take much in so it doesn’t affect me but, where I did see the big impact was the likes of staff that I worked with. I’ve got seven staff and there are 3 smokers down to one. I know four prisoners who are now totally off smoking.’

Managers strongly supported this aspect of the Project, while recognising the challenges involved.

‘We actually designed the bid around prisoners, staff and prisoner’s family so it was kind of a tripartite set of stakeholders I suppose we were aiming at so that was pretty clear that we would try to achieve that.’

‘I think staff are aware of the Project, they certainly are aware of the food initiative and stuff like that. Some of them have obviously worked closely with (the HPO), but not everybody in the prison so they will be more aware.’

‘Getting involved with staff has been a massive positive because they started to see that it is actually for us as well and it’s helping us and get involved in the health promotion days and get involved with some literature with the staff.’

‘I would have said in my view 33% success rate for staff but I am not unhappy about that.’

‘Some resistance on the part of staff to outside intervention – may be easier when NHS takes over Health Centre’.

‘Huge challenges even just to get people engaged and (the difficulty of) staff engagement has been mammoth within the prison.’

### 3.8 Summary

Prisoners with experience of the Project recalled a range of oral health messages and had improved oral health-related knowledge and less negative attitudes compared with the control group prisoners. There was little quantitative evidence of change in oral health-related behaviours. There were few differences between the 2010 and 2011 Project surveys (TRI); however there was some evidence of better reported oral health status in the 2011 intervention group compared with the 2010 control group. We conclude that the Project had a beneficial impact on the prisoners’ oral health related knowledge, attitudes and self-report oral health status. Evidence of change in prisoner oral health-related behaviours was limited to qualitative material.



## **4. Evaluation objective 2**

To identify good practice within the Project

This section of the Report highlights areas of good practice for health improvement within the Project. Three areas of good practice will be highlighted: the adoption of the Framework for Health Promoting Prison, evidence-base oral health improvement, and the use of various methods of health promotion within the prison environment.

#### **4.1 Good practice adopting the Framework for Health Promoting Prisons**

The Project was modelled on the *Framework for the Health Promoting Prisons (FHPP)*.<sup>7</sup> This whole prison approach to health promotion has its theoretical basis in the WHO Ottawa Charter for health promotion.<sup>8</sup> Therefore integral to the Project was the building of healthy public policies, creating a supportive environment, capacity building, improving skills and re-orienting health services. The Project, using the FHPP, incorporated dimensions of the Ottawa Charter and as such provides an example of good practice.

Staff focus group and interview participants commented that the whole prison approach taken by the Project was important in building capacity and encouraging the prison to develop as a supportive environment for oral health. Dissemination of information and health promotion events were of central importance to this process. These events gave staff an opportunity to improve their health promotion knowledge and skills and engender a team approach. For example, fitness regimes were linked to changes in dietary behaviour through events provided in the gym setting. The following comment from a staff member illustrates how the Project targeted its health promotion activities at both prisoners and staff:

‘Yes it’s prison we work in but it’s not all about prisoners and I think the staff get really fed-up always being the ones that don’t really matter and what the Project has done is made us feel we matter because there has been a lot of the staff as well.’

The prison’s progress in this respect was recognised by its achievement of the Healthy Working Lives Bronze Award in 2011. This endorsement of the Project’s whole prison approach is however qualified by the recognition that many barriers remained, including staff availability and commitment.

## 4.2 Evidence-based oral health improvement

The Project attempted to exploit opportunities for behaviour change at transition points where individuals may review their own behaviour, as recommended in NICE guidelines on behaviour change.<sup>1</sup> This was achieved through work focussed on the induction of new prisoners within the National Induction Centre. Kerr House, where prisoners are prepared for release, may offer another fruitful transition point.

The various aspects of oral health improvement in the Project were underpinned by evidence-based practice. Examples of this include the promotion of fluoride toothpaste in concentrations of 1450ppm as recommended by the Cochrane Review by Marinho *et al*;<sup>13</sup> the role of non-milk extrinsic sugars in dental caries, in particular the consumption of sugar-sweetened drinks as a causative factor in both dental caries and obesity;<sup>14</sup> the evidence base linking smoking with mouth and oral cancer;<sup>15</sup> and NICE guidelines on recall interval for dental examinations.<sup>16</sup>

## 4.3 Good practice in administration of the Project

The presentation of the Project's oral health messages and materials, while grounded in the FHPP, also reflected the evidence base with regard to the tailoring of health messages to the client group. Three different approaches were used which illustrated good practice in the delivery of the Project. These approaches were information flow, empowerment and support, and agenda setting.<sup>17</sup>

### a. Information flow

Oral health messages were presented throughout the prison as leaflets and posters as well as DVDs and other reading materials such as coasters concerning smoking and oral cancer. This approach was well received by staff as '*raising awareness*' and knowledge of oral health matters. Information flow surrounding oral cancer and smoking cessation was highlighted by staff as good practice. This was considered to be an important element of the Project, given prisoners' high risk behaviours (smoking, drug use, poor diet, poor dental hygiene). The following comment highlights the value of the oral health written information for new prisoners at induction:

‘You can always tell at induction what information is left lying around and what’s not and (the oral health) stuff always were taken away which was good.’

### **b. Empowerment and support**

Using tailored messaging<sup>18</sup> allows health education to be specific to the client’s psychosocial needs. Face-to-face interventions permitted clients to be supported and empowered as they attempted to change their health behaviours. For some prisoners, good oral hygiene was part of keeping up their self-esteem, and had particular relevance at visits.

‘It’s the only thing you’ve got is a wee bit of pride in your appearance in here you know what I mean. And if you’ve not got that, it’s important with a visit for us, you know when seeing people to try and least look your best you know what I mean?’

Both SPS and NHS managers made a related point that the Project had empowered fathers to better interact and bond with their children during visits.

‘I think it’s a clever approach ... whilst their father as parent educator is involved in the process, he must be observing some of this message themselves as well you know, it’s good to tell my son and daughter this therefore it must be a good thing, you know . Because it must be hard sometimes with distance from your family to comfortably engage in a meaningful conversation.’

‘I think they see that as a chance to say (to their kids) I am telling you how to eat, how to look after your dental hygiene.’

‘I thought that was a really lovely idea to get the message across about healthy eating and fruit, but also giving something for the father and the child to do together, and so things like that eh, I thought have been fantastic, ... cos there’s this extra motivation within the prisoners who have maybe young children.’

### **c. Agenda setting**

A partnership approach to project management was intrinsic to the Project. In the prison setting competing demands included challenges of the prison environment, differing expectations of the Project, and problems with staff engagement. The necessity for agenda

setting to be shared between the SPS and NHS was recognised as a means of ensuring sustainability of the Project. The following comments illustrate:

‘We had some long discussions about, you know, OK what is the outcome here and how do we measure success ... before we moved to a new and different role.’

‘(need) an expectation for each organisation from outset so each agency may agree the aims and objective ... I think on top of this (we need) a lot more steering committee involvement.’

#### **4.4 Summary**

The Project adopted the Framework for Health Promoting Prison (FHPP) and used the evidence-base to inform its oral health improvement initiatives. It used a variety of approaches to oral health improvement which included information flow, empowerment and support, and agenda setting between the SPS and NHS.<sup>17</sup>





## **5. Evaluation objective 3**

To explore the challenges of working in a prison environment and the impact of the Project on the prison environment, structures and systems

Health improvement in the prison setting traditionally adopts an individualistic approach to modifying health-related knowledge, attitudes and behaviours and a settings approach to oral health improvement has not previously been adopted in a Scottish prison. As such, the Project is a unique undertaking in its aim to develop a setting more supportive of oral health improvement. It was envisioned the Project would deliver outcomes demonstrating changes in the prison environment, structure and systems. This section explores the challenges which may have influenced this undertaking and to what extent this model of health improvement was delivered.

### **5.1 Challenges to oral health improvement**

Prisoners', staff and managers' perceptions of oral health improvement challenges were examined from the qualitative data collected. The challenges identified were organised into the social determinants of health experience as recognised by the World Health Organization: individual, individual lifestyle factors, social and community networks, living and working conditions, and the general socio-economic, cultural and environmental conditions (Table 2, p39).

At the individual level prisoners' personal circumstances and lifestyle choices were the main challenge identified by all participants. Poor dental health-related behaviours alongside high dental treatment needs prevented progress toward oral health improvement and barriers for behaviour change included oral health literacy, attitudes towards health improvement, and age. Difficulties engaging and involving individuals in health improvement efforts were further acknowledged although this challenge applied to both prisoners and prison staff.

'I think patient mentality as well, the blame culture thing, I think that they've got that throughout their life ... it's the same with the dental treatment. They eat sweets or they don't brush their teeth, it's not their problem.'

'Problem is to try and change the eating habit of a grown man, they might not really want to do that; that's the side you are trying to change ...'

Poor dental health experience in the prisoner population was attributed to long-term behaviours originating from communities outside the prison setting. Within the prison setting, oral health-related risk factors embedded within prison culture (e.g. smoking) were recognised barriers for oral health improvement.

‘Probably more aware but I don’t think the smoking culture will stop somewhere like in prison.’

The Project operated *between* as well as *with* prisoners and staff. The integration of health improvement within the day to day prison routine was to some extent dependent on the dynamics of staff-prisoner relationships and perceptions among some staff that health improvement was a responsibility outside their remit.

‘... it’s not just convince prisoners because, if you want prisoners to attend it, the staff say “you need to go there” they would be going ... So you need to initially convince staff which is just hard as anything else to convince them to go and them saying to prisoners to say “you should be going to that.” ’

‘They just don’t think it’s their role, they don’t understand what health improvement is, they don’t value health improvement.’

Prisoners identified extensive difficulties accessing dental treatment – a sentiment accepted by staff and managers. Inappropriate dental referrals, limited funding and underdeveloped partnership working between the Project and dental service were seen as compounding factors. Resources available to prisoners presented a challenge due to limited choice and accessibility, and perceived poor quality SPS oral health-related resources e.g. toothpaste, healthy food. Inadequate access to resources was also identified as a challenge for prison staff, who reported healthy eating was difficult to achieve in the prison setting. Restricted resources also influenced the rate of progress where outside agencies were involved, including the HPO.

‘They’re not getting to see the dentist at the frequency they would like. If someone has a blister in their mouth or something, they know they’re gonna be waiting a long time before they get seen.’

‘(The HPO) struggled to get adequate resources especially when she came across she did not even have a computer you know. Stuff that maybe other members of staff are not aware of ... that made it quite difficult trying to sort of implement a lot of the things that (HPO) wanted to do. So there were quite a few barriers to an outside contractor.’

Within a wider context, staff observed the necessary structures and systems to support health improvement were absent: funding allocations, priority of custodial requirements over health improvement initiatives, and omission of prisoners’ health improvement activity in the PR2 record system. Other health improvement issues could take priority over oral health and, in general, such projects did not include prison staff.

Moreover, it was felt that staff lacked knowledge of the aims and methods of health improvement, partly because of insufficient training opportunities.

‘I think there’s a very limited understanding of maybe what health improvement is’

‘I think the problem again comes down to money because I know that in these years that I have worked we give out sugar and (the HPO) liked to change the sugar to a sweetener and she did not get that because it was more expensive. So that was like a simple thing she tried to change and it was not bad: all this comes down to that’  
(rubs fingers together).

## **5.2 Project impact on prison setting**

In meeting the aims of the Project a range of health improvement initiatives were developed and implemented by the HPO (Figure 5). The introduction of a full time employee dedicated to oral health improvement was itself a change noted by Scottish Prison Service (SPS) staff who observed the HPO had effectively integrated within a challenging environment and was a resource they could readily access:

‘The approach was very much about trying to cover in as much a holistic sense as possible the whole kind of issue around people’s lifestyle, environment and what makes them more or less likely to look after their oral health and also ... permeate ...

infrastructure of an environment in a way that would have a longer life in terms of sustainability of the messages and the kind of developments that we might have taken over the life of the Project.'

'It's not for us to bring resources to the table it's about saying come in and challenge us, fit in with what we are doing and push us to do better, speak to operational level officers about what can you bring.'

'Setting up projects in prison, it is 10 times harder than it is outside, what you would do outside is all just going to the community and setting up ... in here its a lot different because there are different aspects to it. Security for example ... but it must have went as smoothly as far as she is concerned because it was never raised as a concern ...'

'From a strategic level or a management level I think the impact in terms of cultural change and people being aware of (the HPO's) role and what she does. Because she is one person, one person can get lost in this establishment ... you can have a post in this establishment and people don't even know what that person does whereby if you ask a prisoner or if you ask a staff member they will know what (the HPO) does, they will know how to access her, they will know her number or they will know if they phone her she will get back to them so I think in terms of her communication skills ...'

By 2011 the Project had successfully introduced resources in the prison including a range of educational materials delivered in different contexts e.g. group talks at induction, posters and leaflets developed around literacy barriers, coasters raising awareness of smoking-related cancer risks, oral health themed calendar, and presentations given at wider health-related events. The diverse use of health educational approaches was recognised by staff as appropriate for groups within the prisoner population each with their own needs:

'... so again it's not just about the one size fits all, she looked at things where different generations and different groups.'

The extensive use of these health educational approaches was however not felt to reflect the scope of the Project's original aims and objectives:

‘We wanted to look at environment, we wanted to look at policies, we wanted to try and build into sustainable changes to make the environment more health promoting ... it tended to be just activities ... very traditional health improvement, health education type approach which was not the approach that we'd planned to take’

Some environmental changes are apparent. The HPO was described as instrumental for the introduction of the Healthy Working Lives (HWL) initiative. Through HWL the prison staff have a forum where health improvement can be discussed and changes implemented. There is a commitment to build on the progress represented by the achievement of the HWL Bronze Award. Moreover, strengthened partnership working has increased the capacity for health improvement in the prison across a range of settings e.g. catering, smoking cessation, induction, and family liaison. However, the cost-effectiveness of continuing investment in a full-time role focused on oral health was questioned, particularly given the extensive groundwork completed.

Overall, the partnership score resulting from the Nuffield Partnership Assessment Tool<sup>10</sup> was in the highest category, indicating that the parties involved in the Project had worked well together. This conclusion is reinforced by each aspect of the partnership analysis process (TR5). Participants also felt that partnership working was important, particularly in regard to the need to ensure commitment to and ownership of the Project across people and services. All but one participant felt that the NHS-SPS partnership had achieved the Project's aims and objectives. Differences between the two agencies were marginal but still worth noting. NHS participants' partnership scores were slightly higher than their SPS counterparts, with SPS participants indicating that some areas of the partnership working related to the Project may need further exploration and attention (see TR5).

The evaluation data present a range of evidence supporting the view that some environmental and policy changes were achieved. However the sustainability of these changes remains a concern. Comments suggest that staff engagement in providing health promotion remains a key barrier to achieving the aims of the Project:

‘Health promotion is seen as extra and I think that’s quite a lot to expect of people who are in other jobs.’

‘Really try and embed health improvement principles into the prison, and I don’t know if we managed to do that.’

‘Very few, I would say definitely the minority, are supportive.’

Therefore sustainability of any gains made through the Project is dependent on maintaining and extending the level of SPS staff engagement in health improvement, whether through the Project or independently. Examples of these include management, catering and induction.

‘I think she also reflected on what is available and she has come up with the video version I use. And that’s available in the residential area.’

There are also examples of planned Project initiatives which were not fully developed or sustained. Examples of the former are a peer education programme and development of prison dental referral policies, while resources for visiting families including fruit and vegetable planters and an oral health-themed playbox were developed but could not be sustained. The reasons for limited success ranged from difficulties engaging the prison dental service, inadequate funding resources to replace materials, changes to the prison routine as a result of the move to a new building, and difficulties engaging prisoners. These withdrawn initiatives raise an important question about how challenges may be overcome in such health improvement projects.

‘We have a population whose oral health is poor for all sorts of demographic reasons and so on. But we spend our time in terms of service delivery just reacting to improving dental health rather than actually trying to impact the state of dental or oral health.’

Finally, SPS and NHS managers made a number of suggestions on how the Project might be reconfigured and developed once its initial term had been completed. These sometimes conflicting views are summarised below.



### **Scope and settings**

- Health improvement is more accepted in prison now after establishing potential through the Project – inform future direction.
- Broader health promotion role may not work.
- Be less ambitious in range of target groups.
- Consider whether pre-release prisoners may be more appropriate target.
- Initiatives may be appropriate in other settings e.g. young prisoners.
- Reduce to part-time HPO input.

### **Staff**

- Recognise issue of low staff participation in Healthy Working Lives initiative.
- Teach trainee Prison Officers about self-esteem and oral health to spread the message.
- Drop the staff element.

### **Dental Service**

- Improve link with clinical service.
- Improve dental service, possibly by re-directing Project funds.
- Drop the dental service/referrals objective.

### **Management and administration**

- Establish early and sustained dual management involvement.
- Integrate Project better to management structure, prison culture.
- Ensure adequate resources.
- Continuity of Project staff important.
- Implies cross-boundary working.
- Recognise that agencies may have different priorities.

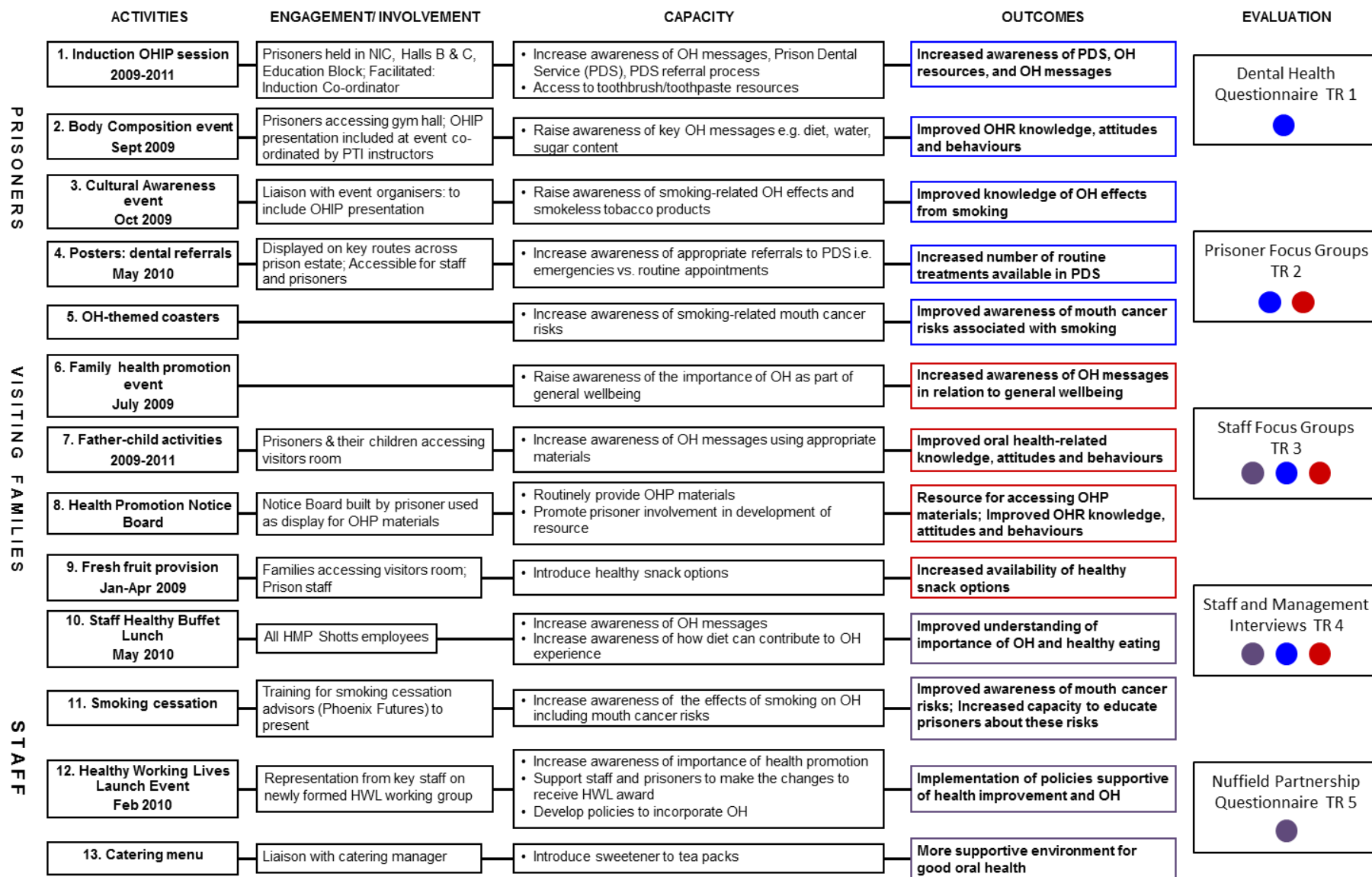
### **National context**

- NHS takeover will improve NHS Lanarkshire profile and representation in prison.
- Develop Project within a national Project strategy for prisons.

### 5.3 Summary

The Project introduced changes within the prison environment which were recognised and valued by participants. These changes included increased awareness of the importance of oral health among prisoners and staff, the importance of multidisciplinary working with colleagues from SPS and NHS, and recognition of the possibility that the Project may decrease pressure on the dental service by promoting oral health, thereby reducing costs. Managers made a range of suggestions regarding how best to build on the experience accrued during the Project's lifespan.

**Figure 5 Oral Health Improvement Project (Project) Overview**



**Table 2                      Social determinants of oral health in HMP Shotts**

	PRISONERS	STAFF	MANAGEMENT
<b>Individual and lifestyle factors</b>	<ul style="list-style-type: none"> <li>▪ Nearly 50% of all prisoners have loose or decayed teeth; sensitive teeth; toothache or discomfort in their mouths</li> <li>▪ Poor oral health literacy</li> <li>▪ Pain only dental attendance pattern</li> <li>▪ High sugar-containing diet</li> <li>▪ 68% of all prisoners smoke and/or use drugs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Poor dental health status</li> <li>▪ Complex health needs</li> <li>▪ Poor literacy skills minimise health improvement efficacy</li> <li>▪ Mind-set and age are barriers to behaviour change</li> <li>▪ Background of opioid use: associated with reduced saliva and thus poor dental health experience</li> <li>▪ Oral health (OH) is not a high priority for all prisoners</li> <li>▪ Dental treatment is priority for some but in relation to appearance rather than health</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limited oral health-related behaviour change from Project</li> <li>▪ Poor literacy skills</li> <li>▪ Prisoners not always available to access project events</li> <li>▪ OH is low priority in comparison to other needs prisoners choose to spend their allowance</li> <li>▪ Value of oral health improvement (OHI) is lost in unmet dental treatment needs</li> <li>▪ Prisoner's misuse resources: security considerations</li> <li>▪ Engagement/involvement target populations was a challenge (prisoners and staff)</li> <li>▪ Prisoners more aware of dental pain in prison: controlled environment where ad hoc pain relief is not accessible</li> </ul>
<b>Social &amp; community networks</b>	<ul style="list-style-type: none"> <li>▪ Normalised dental behaviours are barrier for change</li> </ul>	<ul style="list-style-type: none"> <li>▪ Normalised dental behaviours (family culture) are barrier to change</li> <li>▪ Prison environment likened to revolving door where behaviour change is very difficult</li> <li>▪ Prisoners only engage when incentive is given</li> <li>▪ Smoking is embedded in prison culture</li> <li>▪ Health improvement is regarded as NHS responsibility to be supported by SPS</li> <li>▪ Staff play key role in ensuring prisoners have access to and attend events (context: sometimes difficult to engage staff)</li> <li>▪ SPS staff relationship with prisoners wouldn't support a health promotion role responsibility: distrust</li> <li>▪ Difficult to motivate some staff to take on additional roles/responsibilities or working hours</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some limited knowledge of good OH behaviours (parental input)</li> <li>▪ No evidence harder to engage populations were reached</li> <li>▪ Prison culture presents barrier to behaviour change</li> <li>▪ Some staff perceptions: prisoners are undeserving of health initiatives</li> <li>▪ Health improvement is not viewed by all as SPS staff responsibility</li> <li>▪ Relatively inexperienced staff (health improvement) led Project in environment known to be challenging</li> </ul>

<b>Living &amp; working conditions</b>	<ul style="list-style-type: none"> <li>▪ Limited number of dental appointments: no treatment, incomplete treatment, and no dental check-ups</li> <li>▪ Inappropriate dental treatment requests</li> <li>▪ Sundry purchases can only be made once a week on a certain day and time</li> <li>▪ Project toothbrush was good but no similar quality resource can be readily accessed within prison</li> <li>▪ Personal allowance: weekly spend limits limit access to healthy options</li> </ul>	<ul style="list-style-type: none"> <li>▪ Historical experience of difficulties accessing dental and other health services in community setting</li> <li>▪ Availability of prison dental service (PDS) appointments is changeable e.g. security; treatment times</li> <li>▪ Queue jumping to get dental treatment – some prisoners with genuine pain are left waiting</li> <li>▪ Long waiting times for PDS undermined the Project</li> <li>▪ Access to PDS more difficult than other health services</li> <li>▪ PDS treatment received is sometimes intended as temporary measure but then never followed up</li> <li>▪ Weak partnership working between PDS and Project</li> <li>▪ Staff frequently face health complaints mainly arising from limited treatment opportunities and pain experience</li> <li>▪ SPS don't provide access to wide range of OH products and quality of toothpaste is poorer than Project resource</li> <li>▪ Prisoners have minimal access to healthy foods outside of health initiatives</li> <li>▪ Funding is a barrier to change for both SPS (e.g. provide resources) and prisoners (e.g. limited personal allowance)</li> <li>▪ Being a non-SPS employee can be barrier to accessing resources in prison setting e.g. computer</li> <li>▪ SPS staff involvement in health improvement is a distraction from their duties and therefore a security issue</li> <li>▪ Not all staff could access events: availability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extensive waiting times for dental treatment in prison: limits access to treatment and de-motivating factor</li> <li>▪ Inappropriate referrals to PDS remains an issue irrespective of Project</li> <li>▪ Need for oral hygienist currently unmet</li> <li>▪ Dental service improvement neglected within Project funding</li> <li>▪ Limited personal allowance for prisoners: can't afford health improvement resources</li> <li>▪ Toothpaste/toothbrush supplied by prison is inadequate</li> <li>▪ Work facilities for staff are poor in terms of healthy eating</li> <li>▪ Communication between two (NHS/SPS) work bases for HPO was not maintained (access to computer)</li> <li>▪ SPS working culture different to other agencies</li> <li>▪ Staff frequently change positions in prison setting: barrier to maintaining momentum behind Project</li> <li>▪ Project wasn't successful in ensuring SPS ownership and input at early stages</li> <li>▪ Roles/responsibilities were not always clearly defined within Project</li> <li>▪ Management support wasn't always perceived to be visible</li> <li>▪ Impact on PDS undetermined with no access to dental records</li> </ul>
<b>General socio-economic, cultural &amp; environmental conditions</b>		<ul style="list-style-type: none"> <li>▪ No mechanism to sustain health improvement projects</li> <li>▪ Other health priorities in prison setting e.g. addiction</li> <li>▪ Staff are typically excluded from funding spent on health initiatives (Project was exception)</li> <li>▪ Security within the prison influences the whole environment</li> </ul>	<ul style="list-style-type: none"> <li>▪ No mechanism/policy to ensure funding and sustainability of health improvement projects in prison setting (including Project)</li> <li>▪ SPS policies are subject to modification in accord with public opinion, press and politics</li> <li>▪ Need to increase staff understanding about settings approach to health improvement</li> <li>▪ Time spent on health improvement is not recorded/recognised on prisoner records</li> <li>▪ Staff frequently excluded from other health improvement projects</li> <li>▪ Custodial requirements</li> <li>▪ Limited resources e.g. materials, staff availability</li> <li>▪ Security within prisons</li> <li>▪ Cost-effectiveness not demonstrated for Project</li> <li>▪ Health promotion isn't a priority in terms of prison healthcare demands, nor is oral health</li> </ul>

## **6. Evaluation objective 4**

To make recommendations relevant to future health improvement  
involvement within prison settings

## 6.1 Recommendations

The Project improved oral health-related knowledge and modified oral health-related knowledge, and attitudes in both prisoner and staff groups. There was no overall change in prisoner oral health-related behaviours. Staff engagement was patchy. The following recommendations arise from work undertaken under one or more of the evaluation objectives, and are designed to build on the experience gained through the first three years of the Project. To avoid repetition, recommendations are presented as a single list without specific reference to these objectives.

It is recommended that:

1. Information flow strategies should be developed to sustain evidence-based knowledge of oral health, accompanied by tailoring of health messages to empower and support behaviour change initiatives, and the exploitation of transition points such as transition and preparation for discharge to increase the likelihood of behaviour change.
2. The Project should explore the felt needs of prisoners to understand reasons for their difficulties in adherence with behaviour change to enable the focusing of health messages to support behaviour change initiatives. Behavioural interventions such as motivational interviewing and prisoner mentor roles should be incorporated into the Project.
3. Prison staff should be offered training in health promotion and be provided with appropriate skills to tailor health interventions to prisoners. Such training should be both in-service and part of the initial vocational training curriculum.
4. Staff should be provided with evidence-based and appropriate oral health information. Accurate information on access to services (e.g. waiting times for treatment) that staff can utilise in day to day prison interactions should be made available.
5. Up to date evidence and guidance on the delivery of health improvement in prison settings should be used to support a sustainable and supportive environment for oral health in HMP Shotts.

6. Project management should explore ways of actively involving Prison Officers and prison staff with specialist roles (e.g. catering, visits, induction) in the development and management of health improvement initiatives targeted at prisoners and staff. These arrangements could include steering group membership, routine liaison between the project and staff groups, enhancing feedback through newsletters and email communication.
7. Closer links between the dental team and the Project should be developed, and the potential for decreasing pressure on dental treatment service by promoting oral health made explicit.
8. Further effort to develop a prisoner-mentor role within Halls should be made in order to increase the likelihood of behaviour change.

It is recommended that SPS and NHS management promote the creation of a sustainable, supportive environment for oral health in the prison setting by:

9. Raising the profile of the oral health of prisoners and staff within the wider prison management structure.
10. Drawing from examples of good practice over the three years of the Project to promote a sustainable, supportive environment for oral health in HMP Shotts. Multidisciplinary and multi-agency team working must be directed to this end.
11. Strengthening dual management arrangements in agenda setting and monitoring to sustain oral health improvement in the prison setting.
12. Initiating work to map out a wider health promotion programme within the prison, of which oral health would continue to represent a major strand.





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## 8. Technical Reports

Technical Report 1: Surveys of prisoners

Technical Report 2: Prisoners' focus groups

Technical Report 3: Staff focus groups

Technical Report 4: Themes from Project steering group interviews

Technical Report 5: Outcomes of the Nuffield Partnership Assessment  
Tool



# **8.1 Technical Report 1**

Surveys of prisoners



## Methodology

Two surveys of prisoners were conducted. In 2010, the HPO surveyed prisoners in the National Induction Centre (NIC) and D Hall during group work sessions. The 2011 survey used the same two settings, using D Hall prisoners as a control group. Recruitment of prisoners to the DHSRU 2011 survey was facilitated by a Prison Officer assigned to the evaluation fieldwork. Prisoners who had participated in the Project were invited to participate in this survey as the intervention group. Survey participants therefore constitute a convenience sample.

For the 2011 survey, questionnaires were administered in a classroom setting by the evaluator. Prisoners were given an explanation of the aim of the survey and their rights regarding their participation. Written consent for participation was sought at this point. No prisoner refused. Completed consent forms are held in the prison health centre.

A number of limitations need to be noted with respect to the data. First, the use of 'intervention' and 'control' implies a clear distinction between prisoners who had contact with the Project and those who did not. While the HPO was actively and intensively involved in the NIC in 2010, some of these prisoners may have left the NIC by the time of the follow-up survey in March 2011. Equally, some of those in the D Hall control group may have had some awareness of the Project. Secondly, it was not possible to identify whether any of the prisoners completed both the baseline and follow-up surveys. As a result, no comparison of responses from the same prisoners over time is possible. Finally, all the data collected are based on prisoner self-reports rather than observed behaviour, for example with respect to their reported diet, oral hygiene, or dental status.

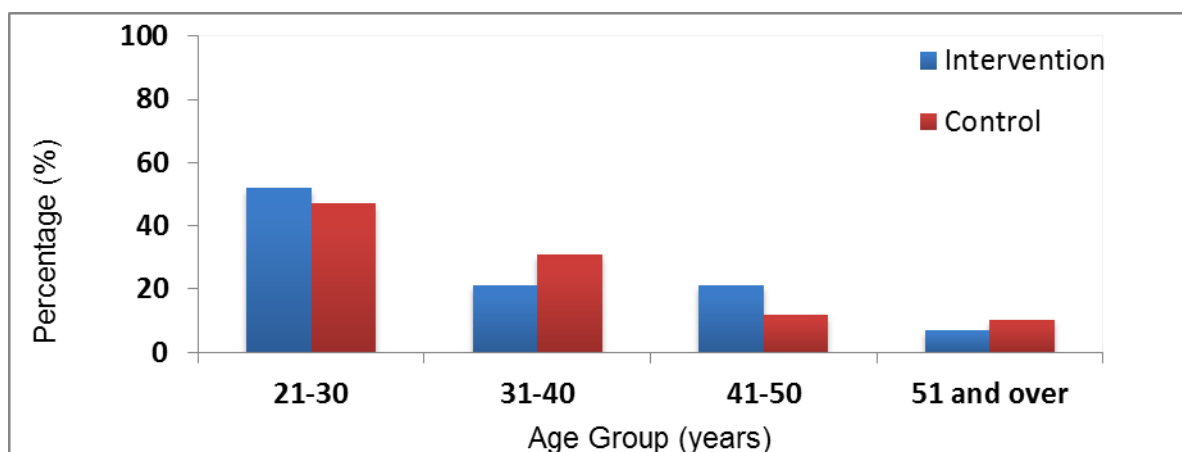
A total of 255 questionnaires (107 from 2011; and 148 from 2010) were completed. All completed questionnaires were coded and entered in an SPSS datafile. Oral health topics were investigated by a series of linked questions (e.g. diet, Project activities) and counts computed to give overall scores. This Technical Report contains reporting of statistical testing for differences between the two groups of prisoners using Chi-square t-test and Analysis of Variance.

## Results

Of the 107 prisoners who took part in the survey in 2011, 58 were designated intervention group and 49 control group. The 148 prisoners surveyed in 2010 were split 76 intervention and 72 control.

The age of the prisoners surveyed in 2011 ranged from 21 to 60 years with a mean of 34. There was no significant difference in mean age between intervention (35.23 [SD 10.62]) and control (33.98 [SD 9.94]) ( $t=0.63$ ;  $P=0.53$ ) (Table 1). The age distributions were similar in the two surveys, with 49% being 30 years old or more in 2010 and 43% in 2011. Mean length of time in HMP Shotts was 2 years, 3 months for the 2011 intervention group and 3 years, 4 months for the 2011 control group.

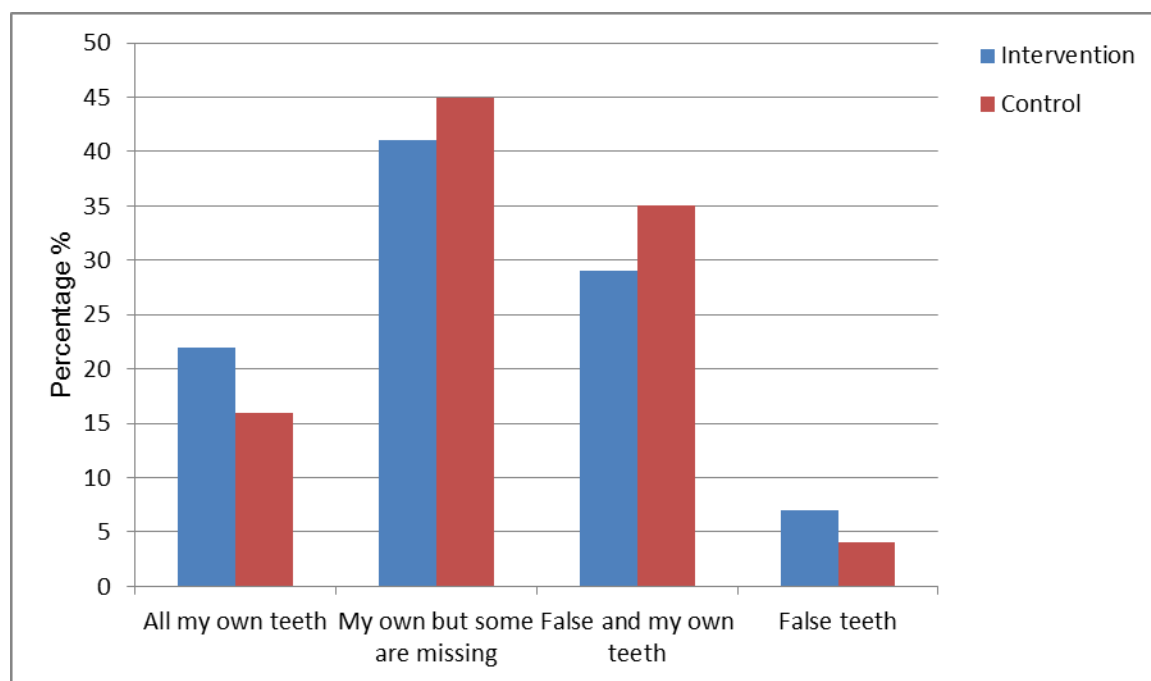
**Figure 1.1 Prisoners' age group, 2011**



## 1. Dental status and oral health-related behaviour before imprisonment

Fewer than one in five had all their own teeth, while over 40% had only their own teeth but one or more missing (i.e. no dentures).

**Figure I.2 Self-reported dental status in 2011**

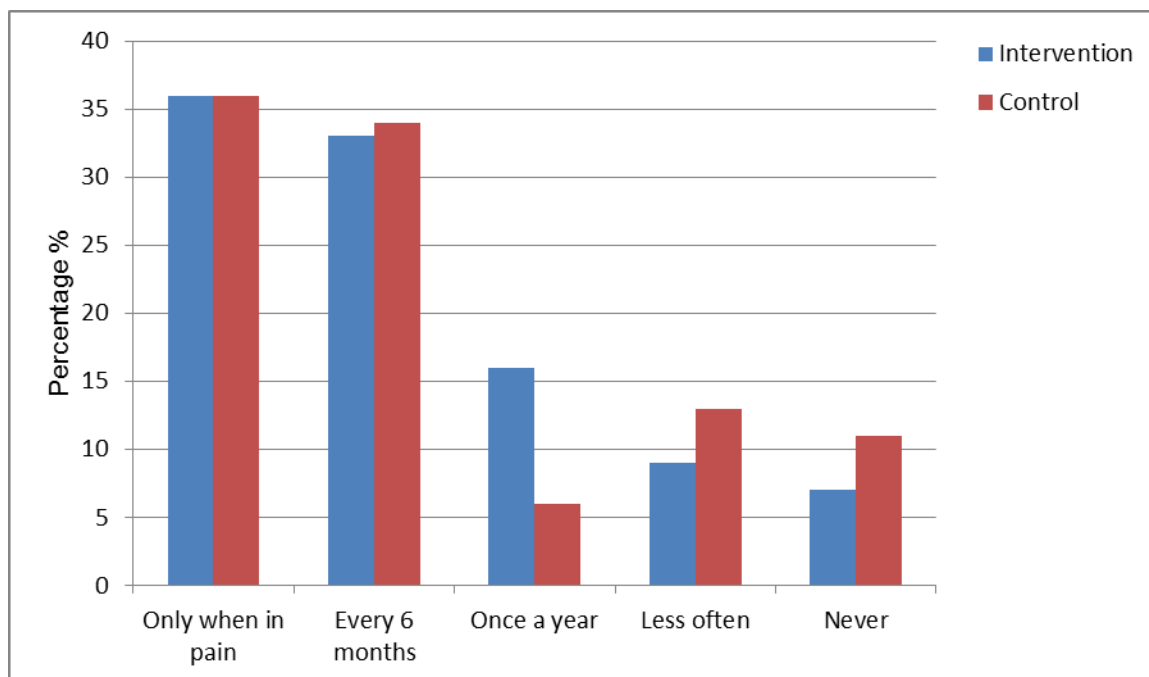


**Table I.1 Self-reported dental status, 2011**

Do you have your own teeth, only false teeth or a mixture of both?	Intervention n (%)	Control n (%)
All my own teeth	13 (22)	8 (16)
My own teeth but some are missing	24 (41)	22 (45)
False teeth and my own teeth	17 (29)	17 (35)
Only false teeth	4 (7)	2 (4)
Total	58 (100)	49 (100)

While similar proportions in 2010 and 2011 had their own teeth (19% and 20% respectively), in 2010 fewer had complete or partial dentures (25% cf. 37%). Over a third of prisoners reported that pre-imprisonment they only attended the dentist when they were in pain or had an emergency. Another third stated they attended on a 6 monthly basis. (Figure I.3 and Table I.2).

**Figure I.3 Dental service attendance pre-imprisonment, 2011**



**Table I.2 Dental service attendance pre-imprisonment, 2011**

Before you were sentenced, how often did you go to your dentist?	Intervention n (%)	Control n (%)
Only when in pain/problem with teeth	21 (36)	17 (36)
Every 6 months	19 (33)	16 (34)
Once a year	9 (16)	3 (6)
Less often	5 (9)	6 (13)
Never	4 (7)	5 (11)
Total	57 (100)	47 (100)

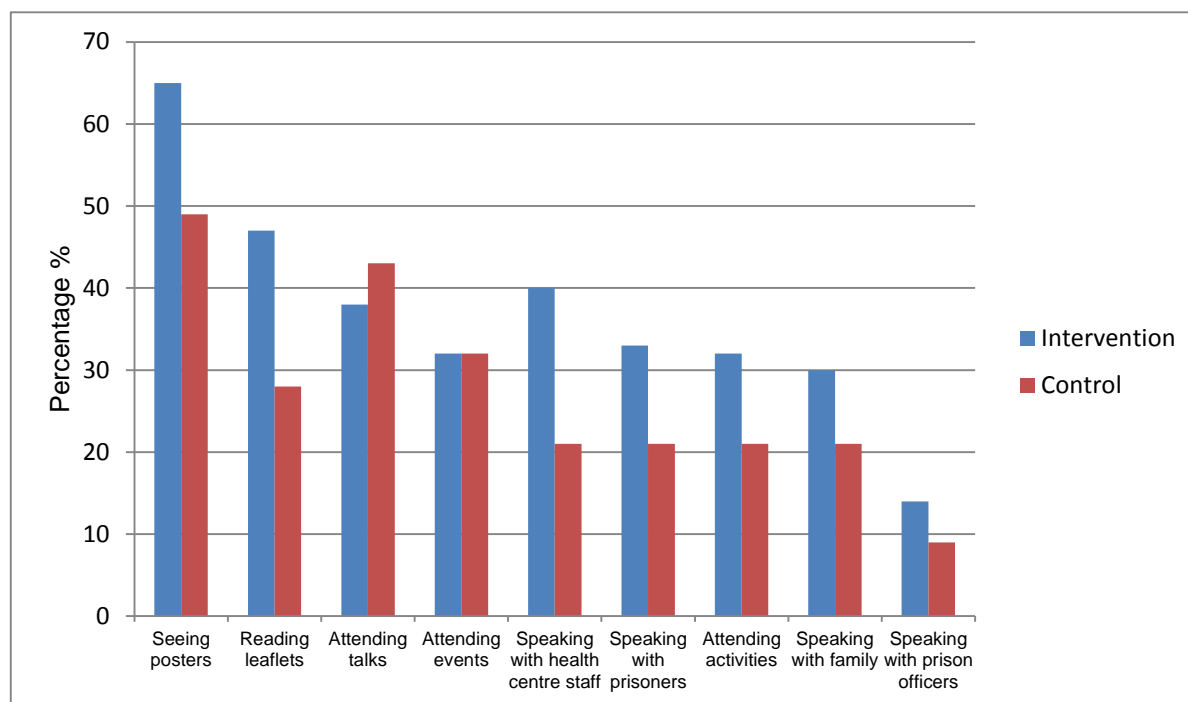
**In terms of age, dental status and use of dental services we conclude that the control and intervention groups were comparable, facilitating the comparison of the two groups regarding the impact of the Project.**

## **2. Awareness of the Oral Health Improvement Project, 2011**

Prisoners were asked of their awareness of or participation in the following Project elements: posters; leaflets; attending talks about oral health; taking part in activities about

oral health; going to special events about keeping healthy; talking about looking after their teeth and mouth to: other prisoners, health centre staff, Prison Officers, or family members (Figure 1.4 and Table 1.3).

**Figure 1.4 Prisoners' awareness of, or participation in, the Project, 2011**



**Table 1.3 Awareness of and participation in the Project, 2011**

Project elements	Intervention group n (%)	Control group n (%)	X <sup>2</sup>	P	eta
Seen posters about looking after their teeth and mouth	37 (65)	22 (49)	3.04	0.08	0.19
Read leaflets about looking after their teeth and mouth	27 (47)	13 (28)	3.78	0.05	
Attended talks about OH	26 (46)	20 (43)	0.98	0.75	0.20
Attended special events about OH	18 (32)	15 (32)	0.00	0.97	
Talked to health centre staff about OH	23 (40)	10 (21)	4.33	0.04	
Talked to other prisoners about OH	19 (33)	10 (21)	1.86	0.17	
Taken part in activities about OH	18 (32)	10 (21)	1.39	0.24	
Talked to family about OH	17(30)	10 (21)	0.98	0.32	
Talked to Prison Officers about OH	8 (14)	4 (9)	0.77	0.38	

Eta: Effect sizes over 0.3 indicate there is a clinical relevance to the statistical significance

Significantly more prisoners in the intervention group stated they had seen posters or had talked to health centre staff about oral health. While no other significant differences were found (the 'read leaflets' item was borderline significant), more of the intervention group reported experience of all but one of the 9 elements of the Project. This trend was confirmed by an overall awareness score based on the number of reported elements (range 0 to 9). Intervention group prisoners had significantly higher mean scores on this measure (intervention group: 3.38 [SD 2.64]); control group (2.43 [SD 1.92]: ( $t=2.08$ ;  $P=0.04$ ).

**We conclude that there is evidence that prisoners in the intervention group had greater and more detailed awareness of the Project.**

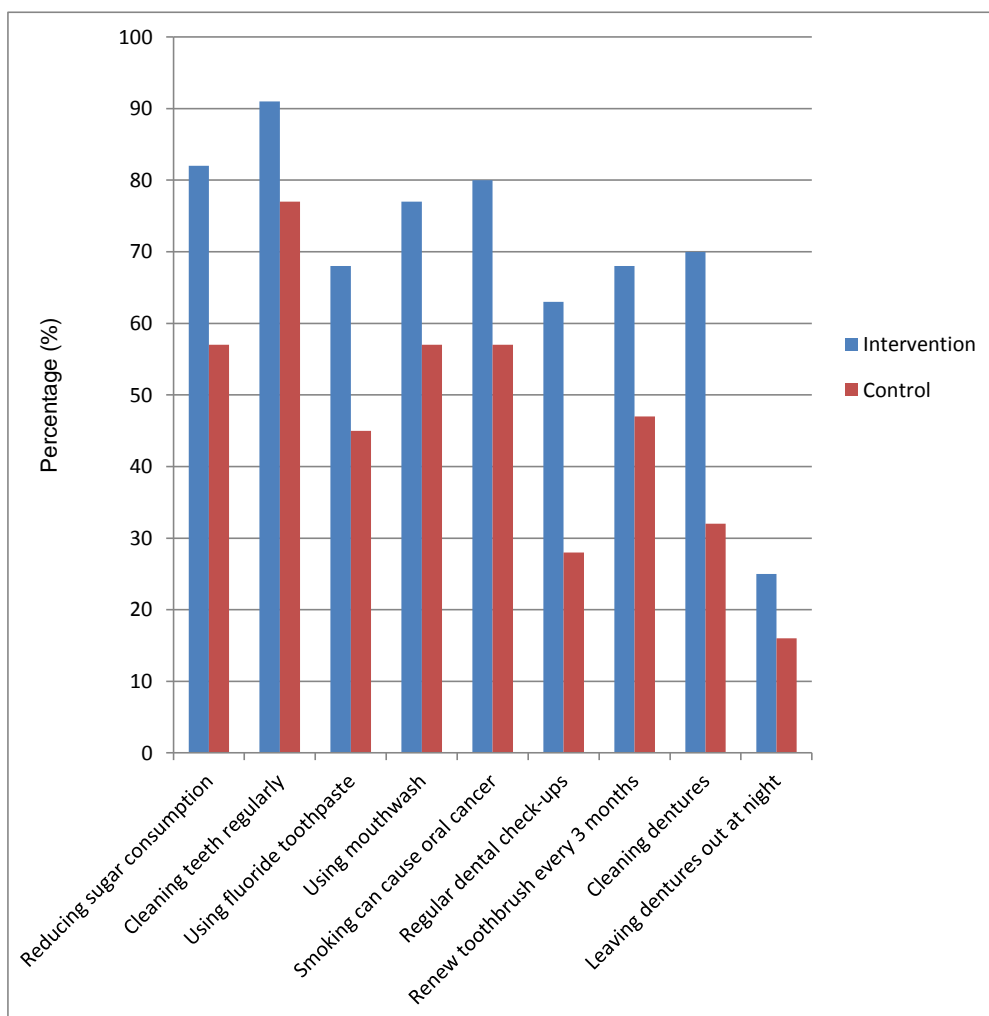
### **3. Prisoners' oral health-related knowledge**

In the 2011 survey prisoners were asked:

*'Since you've been in Shotts prison, which of these messages about looking after your teeth and mouth have you heard about?'*

followed by a list of nine OH messages. As Figure 1.5 shows, there was higher awareness in all nine items, and these differences reached statistical significance in all but one (Table 1.4).

**Figure 1.5 Prisoners' awareness of oral health messages, 2011**



**Table 1.4 Prisoners' awareness of oral health messages, 2011**

<b><i>'Since you've been in Shotts prison, which of these messages about looking after your teeth &amp; mouth have you heard about?'</i></b>	<b>Intervention n (%)</b>	<b>Control n (%)</b>	<b>X<sup>2</sup></b>	<b>P</b>	<b>eta</b>
Reducing sugar consumption	46 (82)	27 (57)	7.55	0.01	0.27
Cleaning teeth regularly	51 (91)	36 (77)	4.08	0.04	0.20
Using fluoride toothpaste	38 (65)	21 (50)	5.61	0.02	0.23
Using mouthwash	43 (77)	27 (57)	4.39	0.04	0.21
Smoking causing mouth cancer	45 (80)	27 (57)	6.38	0.01	0.25
Regular dental check-ups	35 (63)	13 (28)	12.47	0.01	0.35
Renew toothbrush every 3 months	38 (68)	22 (47)	4.66	0.03	0.21
Cleaning dentures *	14 (70)	6 (31)	5.76	0.02	0.38
Leaving dentures out at night *	5 (25)	3 (16)	0.57	0.48	

\* only prisoners who wore dentures included

eta: Effect sizes over 0.3 indicate there is a clinical relevance to the statistical significance

#### **4. Prisoners' oral health-related attitudes**

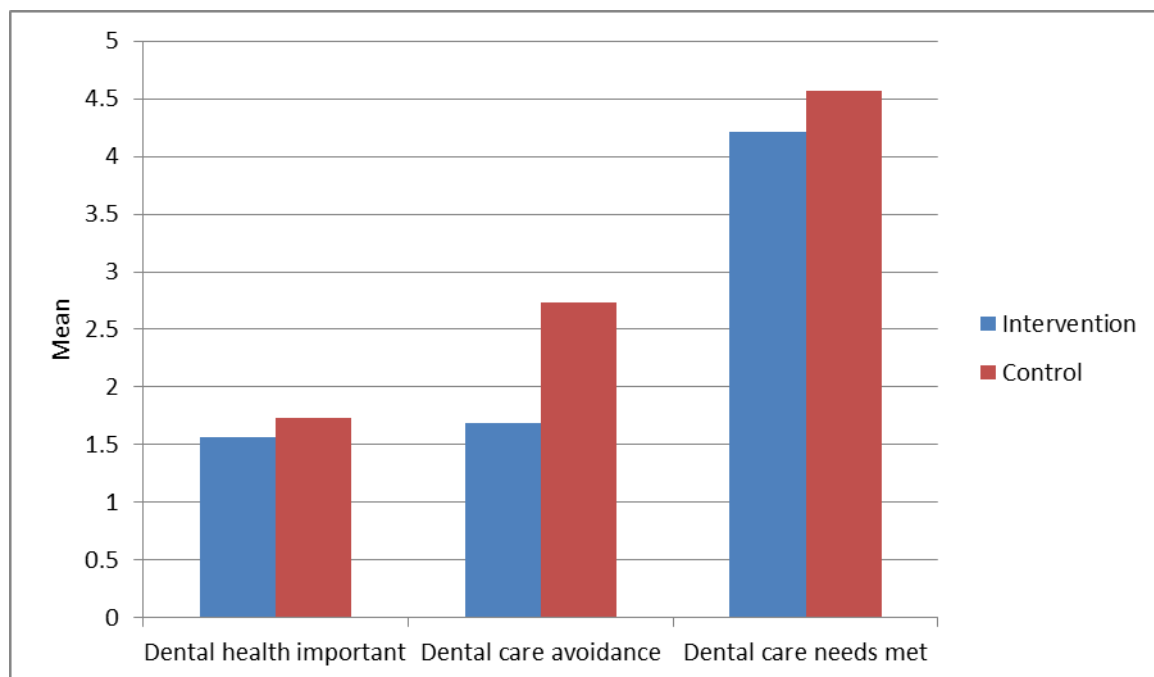
Prisoners' oral health related attitudes were assessed using three questions from the Thomson and Locker Dental Neglect Scale.<sup>10</sup> These questions use a 5-point Likert format ranging from 'definitely no' to 'definitely yes'. Higher scores represent higher dental neglect (Figure 1.6).

There was a significant difference in mean scores between the intervention and control for 'dental care avoidance' (Table 1.5). The difference in the combined mean of these three scores (range 1 – 5) was also statistically significant (intervention group: 2.53 [SD 0.63]; control group 2.81 [SD 0.67];  $t=2.05$ ;  $P=0.05$ ).



**Figure 1.6 Prisoners' oral health-related attitudes, 2011**

(higher score: higher dental neglect)



**Table 1.5 Prisoners' oral health-related attitudes, 2011**

(higher score: higher dental neglect)

Dental neglect attitudes (1-5 scale)	Intervention Mean (SD)	Control Mean (SD)	Mann-Whitney U	P
Dental health important	1.57 (1.24)	1.73 (1.26)	1066.5	0.27
Dental care avoidance	1.69 (1.36)	2.23 (1.53)	775.0	0.02
Dental care needs met	4.21 (1.30)	4.57 (0.83)	1028.0	0.19

**We conclude that prisoners exposed to the Project were less likely to display attitudes reflecting dental neglect.**

## 5. Prisoners' oral health-related behaviours

### a. Toothbrushing

**Table 1.6** Reported frequency of toothbrushing with toothpaste, 2011

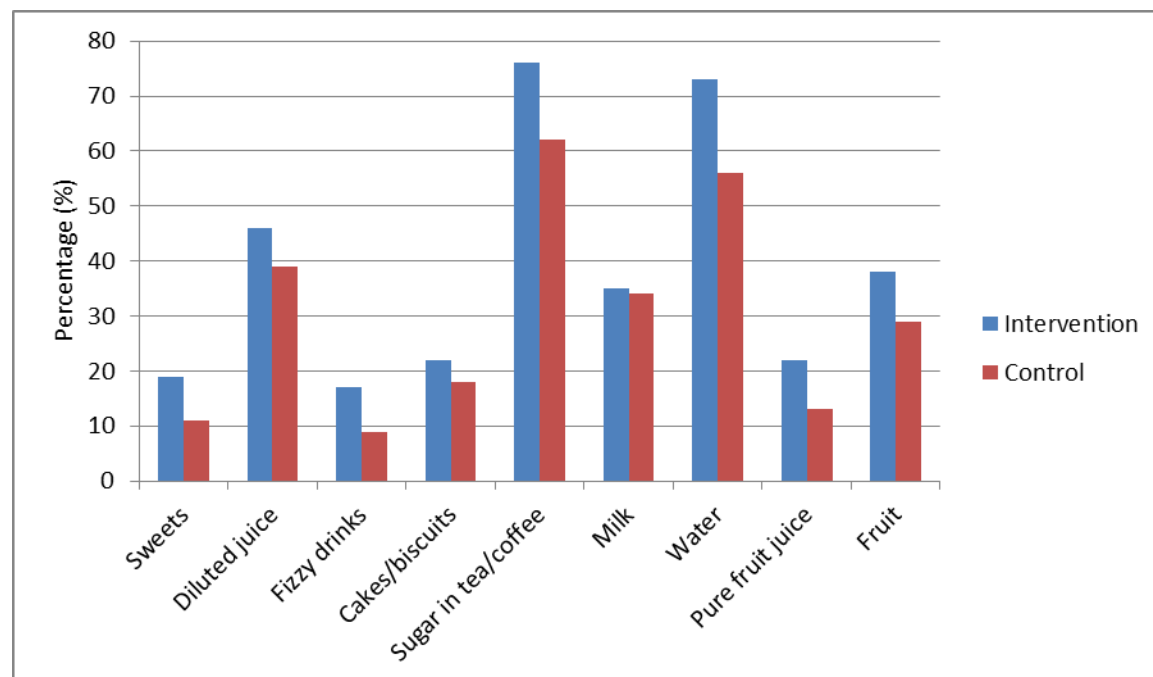
How often do you clean your teeth?	Intervention group n (%)	Control group n (%)
More than twice a day	12 (21)	10 (21)
Twice a day	32 (56)	24 (50)
Once a day	10 (18)	6 (13)
Every 2-3 days	1 (2)	7 (15)
Once a week	1 (2)	1 (2)
Never	1 (2)	0 (0)
Total	57 (100)	48 (100)

There was no evidence of any difference between intervention and control groups in frequency of toothbrushing either in 2011 ( $\chi^2=7.11$ ,  $df=5$ ,  $P=0.21$ ) or in 2010 ( $\chi^2=4.23$ ,  $df=5$ ,  $P=0.52$ ).

### b. Diet

Figure 1.7 shows reported consumption of healthy and unhealthy diet elements on at least a daily basis (2010 data are not shown for brevity). A total score was computed, weighted for frequency of consumption of healthy and unhealthy components. There were no statistically significant differences either for individual items or for the total score based on frequency of consumption of each item, range 9 (unhealthy diet) to 54 (healthy diet): intervention group mean score: 29.07 [SD 6.83]; control group 30.53 [SD 6.83] ( $t=-0.94$ ;  $P=0.35$ ). The equivalent scores in 2010 were 28.21 [SD 5.64] and 28.45 [SD 5.97]. Analysis of variance found no between-group differences when the four group means were compared ( $F=1.29$ ,  $df=3$ ,  $P=0.28$ ).

**Figure 1.7 Consumption of diet components on at least a daily basis, 2011**



## 6. Oral health related behaviour

In the 2011 intervention group, 69% (40) stated that they smoked tobacco and/or used drugs, compared with 58% (28) in the control group ( $\chi^2=1.29$ ,  $df=1$ ,  $P=0.26$ ). Among smokers, there was no significant difference in 2011 in the mean reported number of cigarettes smoked each day between intervention (13.78 [SD 10.97]) and control groups (14.73 [SD 10.29]), ( $t=0.37$ ;  $P=0.71$ ). When non-smokers were included, the mean number smoked fell to 8.59 (10.83) for the intervention group, and 10.83 for the control group. This difference was not statistically significant ( $t=1.04$ ,  $P=0.30$ ). In 2010 the proportions smoking and/or using drugs were 67% and 75% respectively ( $\chi^2=3.74$ ,  $df=3$ ,  $P=0.29$ ). Table 1.7 shows prisoner reports of oral health-related behaviours.

**Table 1.7     Reported oral health-related behaviours, 2011, 2010**

	<b>2011</b>		<b>2010</b>			
<b>Oral health-related behaviours undertaken</b>	<b>Intervention group n (%)</b>	<b>Control group n (%)</b>	<b>Intervention group n (%)</b>	<b>Control group n (%)</b>	<b>X<sup>2</sup> (P)</b>	<b>eta</b>
Sugary food/drinks only at meal times	18 (31)	12 (27)	24 (32)	30 (28)	0.50 (0.92)	
Regularly clean teeth with toothpaste	48 (83)	38 (83)	70 (92)	63 (88)	3.45 (0.33)	
Use mouthwash	33 (57)	21 (46)	55 (72)	46 (64)	9.36 (0.05)	0.19
Don't smoke	19 (33)	15 (33)	27 (36)	18 (25)	2.05 (0.56)	
Dental check-up every 6 months	14 (24)	7 (15)	4 (5)	16 (22)	11.30 (0.01)	0.21
Renew toothbrush every 3 months	40 (69)	30 (65)	62 (81)	53 (74)	4.77 (0.19)	
Clean false teeth	14 (67)	11 (61)	15 (83)	18 (69)	2.31 (0.51)	
Leave false teeth out at night	4 (19)	4 (22)	10 (56)	11 (42)	7.60 (0.06)	

eta: Effect sizes over 0.3 indicate there is a clinical relevance to the statistical significance

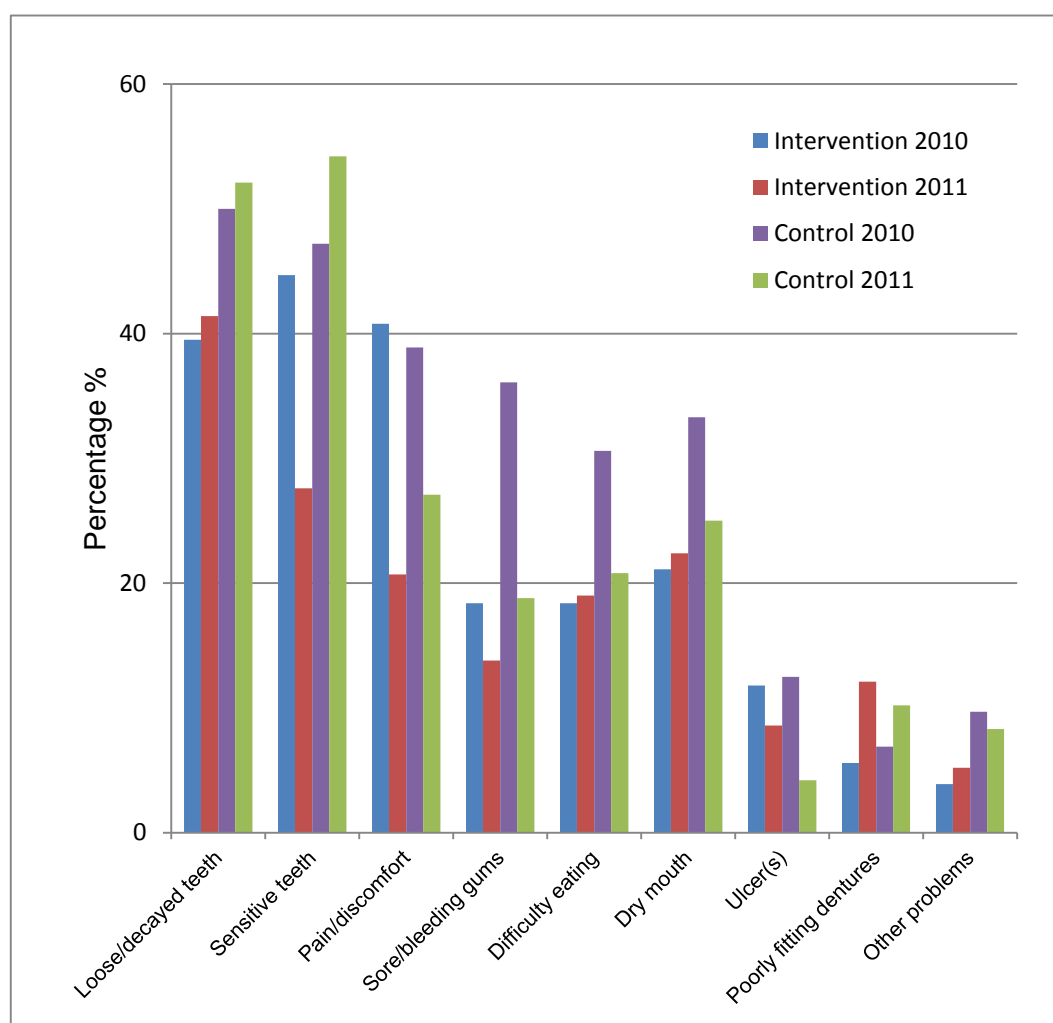
There is no discernible pattern to the data in Table 1.7 which might indicate an increased adoption of these behaviours in response to exposure to the Project, with the possible exception of reported use of mouthwash, which was higher in the intervention groups in both 2011 and 2010. The mean of these behaviours was calculated and compared across the four groups. No significant differences were identified (ANOVA:  $F=2.01$ ,  $df=3$ ,  $P=0.11$ ).

**Overall, we conclude that there is no evidence that the Project had any impact on reported diet or oral health related behaviours.**

## 7. Reported oral health problems

Prisoners in 2010 and 2011 were asked if they had loose or decayed teeth, sore or bleeding gums, pain or discomfort in the mouth, mouth ulcers, difficulty in eating, dry mouth, sensitivity when eating/drinking, badly fitting false teeth, any other problems (Figure 1.8).

**Figure 1.8 Self-reported frequency of oral health problems, 2011, 2010**



The mean number of reported oral health problems in each group was:

Intervention 2010: 2.0 (SD 1.9)	Control 2010: 2.7 (SD 1.9)
Intervention 2011: 1.7 (SD 1.7)	Control 2011: 2.2 (SD 1.9)

An analysis of variance (ANOVA) found a significant difference in mean number of oral health problems across the four groups ( $F=2.96$ ,  $df=3$ ,  $P=0.05$ ). When individual groups were compared with the 2010 control group as a baseline, the 2011 intervention group had a significantly lower mean ( $P=0.01$ ).

Prisoners in the 2011 survey were asked to assess the state of their teeth, mouth and gums, using a 5-point Likert scale ranging from very good (scoring 5) to very poor (scoring 1). There was no significant difference in mean scores between the control (3.26 [SD 1.14]) and intervention groups (2.88 [SD 1.23]) for the question '*How do you rate the state of your teeth*' ( $t=1.63$ ;  $P=0.10$ ). Similarly, there were no significant difference in mean scores between control (3.00 [SD 1.15]) and intervention (2.68 [SD 1.09]) for the question '*How do your rate the state of your mouth and gums*' ( $t=1.26$ ;  $P=0.21$ ).

**We conclude there is some evidence that prisoners in 2011 who had been exposed to the Project had fewer reported oral health problems than the baseline 2010 control group.**



## 8.2 Technical Report 2

Prisoners' focus groups



## Methods

Four focus groups were conducted by the evaluator in Spring 2011. The relevant literature and discussions with the Project staff provided key themes that guided the development of the focus group topics. Prisoners who had had contact with the Project were identified by the HPO and given an explanation of the aim of the focus groups and their rights regarding their participation. Prison Officers were not present during the prisoner focus groups. Written consent for participation was sought at this point. No prisoner refused. Completed consent forms are held in the health centre, HMP Shotts.

The following topics provided a framework for the focus group discussions:

- Their view of the importance of oral health.
- How can oral health be maintained (probes: diet, smoking, fluoride).
- Profile of oral health in the prison setting – a high priority?
- Familiarity with the Project and methods, including written material, events, group work, NIC presence.
- Their assessment of the different tactics used.
- Activities they feel worked well.
- Activities they feel worked less well.
- State of their teeth and mouth, and whether it may have improved.
- What improvements could be made.

All focus groups were audio-recorded and the recording deleted once a transcript of the session had been produced. Analysis of the recordings focused on the identification of patterns in the data in relation to the focus group topics. Additional themes emerging from the focus group data were also included. Selected quotations are included for illustrative purposes.

## Results

Five prisoner focus groups were planned. One was cancelled due to lack of participants. Another was attended by a single participant. The other three involved 2, 7 and 4 participants respectively. Thus 14 prisoners participated in this part of the evaluation.

## **I. Importance of good oral health**

Good oral health was an important issue for most of the prisoners. Aesthetics and appearance related to their teeth emerged as the most important reason for having good oral health. Prisoners linked appearance to confidence, developing close relationships (outside prison), giving right impression at family visits, and avoiding ridicule.

‘Em, looks. Eh don’t want ‘em smelling. And I don’t want ‘em breaking up, falling apart, but I think it’s probably mostly looks and obviously too for chewing purposes, chewing your food.’

‘It’s the only thing you’ve got is a wee bit of pride in your appearance in here ... it’s important with a visit for us, you know when seeing people to try and least look your best.’

In addition to appearance, being able to eat comfortably was mentioned as a benefit of good oral health.

Prisoners were aware that their oral health status was not just a consequence of imprisonment although prison may contribute to oral health problems:

‘I don’t think it’s just because of prison. Although I know some that have come in with really nice teeth and they’re quite like deteriorated.’

However, it was acknowledged that various behaviours learned over a lifetime acted as a barrier to change or increased the risk of oral health problems:

‘... they’ve no been brought up to do it or something, I don’t know. A lot of people still don’t seem to look after their teeth.’

## **2. Awareness of the Oral Health Improvement Project**

A few prisoners remembered having a talk from the HPO. Most prisoners were aware of, and used, the Project toothbrush/ toothpaste packs. These were generally welcomed as both toothbrushes and toothpaste were felt to be better than the prison issue.

‘Just recently found out that you’re not meant to use a hard toothbrush, meant to be soft. I’ve always used hard toothbrushes, so ... em, the only toothbrushes you seem to get now ... oh, I got one fae (the HPO) before on a health day and eh it was a good soft one you know.’

Equally, most prisoners were aware of oral health-related posters and leaflets. They thought the posters and leaflets were very visible and easily accessible throughout the prison, although some posters had been removed. One participant said he was involved in the process of producing Project materials and enjoyed it, in particular being able to use his IT skills.

Health events were also received positively and they were seen to highlight general health issues and provide access to fruit. One participant reported winning a competition held at a health event he enjoyed.

Access to Project resources, including toothbrush packs, and health events appeared to be a challenge for some prisoners.

‘I think some people caused a problem getting to them. Like, I’m sure they had another one and I couldn’t get to it, you know. Couldn’t get to it. I was down in education and then they had to commit to it.’

### 3. Awareness of oral health promotion messages

#### a. Diet

Many prisoners appeared to be aware of the importance of a healthy diet, including choosing low-sugar options and avoiding consumption of sugary food throughout the day. They were also able to name foods with high sugar contents and knew that sugary foods can lead to tooth decay.

‘Aye to avoid sugary sweets and juices and certain fruit I think.’

‘Don’t eat too many sweets throughout a day cos of the sugar.’

However some were also aware that many food items available in prison had high sugar content.

#### b. Oral hygiene

Prisoners’ awareness of how to maintain oral hygiene appeared to be good. The need to brush their teeth regularly for a minimum of two minutes, twice a day, use a soft toothbrush, to brush in right direction, i.e. not up and down, not to brush immediately after eating, and to use fluoride toothpaste were all mentioned in focus groups. Some also mentioned the importance of using mouthwash and dental floss.

‘Em, meant to brush your tooth for a couple of minutes at least. Aye, just recently found out that you’re not meant to use a hard toothbrush meant to be soft.’

‘Floss twice a day.’

‘I think Colgate is good and the actual jail one seemingly is alright but, it’s a horrible ... jus tastes ... you know.’

Some mentioned that soft toothbrushes were only available from the Project and not as standard prison issue. Indeed, the prison issue toothpaste and toothbrush were frequently criticised.

### **c. Smoking and oral health**

Prisoners were aware of some of the effects of smoking on their oral health, including bad breath, stained teeth and receding gums. This awareness is expressed in the quote below:

‘Stains ‘em like hell you know ... it stains them ... and I think that recedes your gums.’

Prisoners are a high risk population with respect to oral cancer. However many appeared unaware of the link between smoking and oral cancer. When prompted, they agreed that the Project’s work to highlight this link was valuable. They indicated a desire for further information in the form of posters/reading materials.

### **4. The prison dental service**

It was clear from the focus groups that the dominant issue relating to oral health for many prisoners was access to dental treatment rather than prevention or oral hygiene. Common complaints were the long waiting time to access the prison dentist, the consequent lack of dental treatment and the limited treatment available.

‘See a difference in the dentist in here. See if you want a dentist to pull a teeth out, they’ll just pull it out nae bother but see if you go outside, oh no I can save it, I can save it’ (laughter).

The limited number of available dental appointments, insufficient or inaccurate information about waiting times, difficulties completing treatment courses, and having no regular dental check-ups were cited as having a demotivating effect on prisoners’ oral health self-care. The following quote illustrates this:

‘Prisoners do want to keep healthy, you know, I believe they do want to, it’s just totally ... when they’ve no got the services to help ‘em ... it’s a catch 22, you know, they maybe want to do it but, you know it’s doesnae actually improve the looks you know.’

At the same time, some mentioned that the limited number of dental appointments gave even more importance to looking after their own oral health.

## 5. Availability of healthy diet options

Prisoners acknowledged that the canteen 'sheet' had improved, and several said they enjoyed the new healthy options offered. Symbols denoting healthy choices were received positively by one prisoner who found them easy to follow.

'There's wee smilies next to it. Show you how you can add it up an' that – that was very good.'

Prisoners were also able to buy healthy food such as fruit through 'sundry purchases'. However, this required prisoners to spend some of their personal allowance on healthy food. Given the limited weekly spend available, this often meant fruit was not bought. Additionally, sundry purchases were said to be only available once a week.

'Fruit would be great you know cos you can order fruit, if you've go' the money, you can order fruit from special ... sundry purchase but, a lot of the time you forget to order it and a lot of the guys havenae go' the money either. And you can only order it one day so, if you forget, you're snookered. It's always a week in advance as well, you know, so ... I've not had fruit for a couple of months, eh. Cos I keep forgetting to put it down on a Thursday; you have to have it in on a Thursday morning and sometimes I remember on a Thursday afternoon and it's too late and then you have to wait till next Thursday before you can order it again, you know.'

## 6. Impact and sustainability of the Project

Focus groups ended with a discussion of the overall value of the Project and how to build on it. Most prisoners thought that the Project had successfully increased awareness of oral health matters and had facilitated behaviour change in terms of improved toothbrushing routine and increased use of dental floss. These points are illustrated in the following quotes:

'She's maybe made the guy's a wee bit more aware you know. I wouldnae say dramatically but, a wee bit, a wee bit jus a wee bit but, you know.'

‘... before that I never even think about it ... not to use water after you brush your teeth ... cos I always rinsed.’

‘I have changed ... I now floss ... I see other boys in the hall are doing things and in fact if it was not for that I would be ...’

One prisoner suggested that his behaviour change (in relation to brushing teeth) had in fact pre-dated any input from Project:

‘You know, I think I’ve started doing things on me own for years ...’

Prisoners did appear to be concerned about the sustainability of changes introduced by the Project, and felt some initiatives had not been sustained even though the Project had not yet ended.

‘See the soup and all that they made and all the stuff they made with the cooks that day, it’s not been made since – so what was the point of that, you know what I mean.’

‘Fruit at visitor’s centre- good idea for a while. They did not keep it up with the fruits.’

Many prisoners returned to the point that there seemed to be a missing link between the Project and the dental service. They thought that without the availability of timely and effective dental treatment, the Project could have little or no impact on their oral health:

‘Tell us to look after it when we know it can be really frustrating if you know your teeth are ... no matter how much you brush ‘em if you have ‘em still full of it’s still decay happening and you can’t do anything about it so, you kinda get the work done to make ‘em look good in the first place to look after ‘em, that’s the problem.’

This and other points raised by prisoners were put to staff in the subsequent focus groups, as well as to managers in face-to-face interviews.

## 8.3 Technical Report 3

Themes from staff focus groups



## Methods

In 2011, seven focus groups were held, involving 20 staff members. Focus group participants included SPS staff from gym, catering, induction, visits, health centre and relevant halls, as well as health centre-based staff from outside agencies. For simplicity, all participants are referred to as 'staff'. Focus groups were conducted by a member of the evaluation team. Staff were given an explanation of the aim of the focus groups and their rights regarding their participation. Written consent for participation was sought at this point. Completed consent forms are held by the evaluation team. Themes extracted from focus group summaries follow the guidelines developed to structure the recorded sessions:

- Familiarity with the Project's methods.
- View of the importance of the Project's aim.
- Assessment of tactics used.
- Activities which worked well.
- Activities which worked less well.
- Impact on staff.
- Impact/relevance to prisoners.
- Overall view of the Project.
- Opportunities to develop health promotion work.
- Barriers.
- Importance of oral health compared with other health promotion work.
- Views on organisational change to NHS provision in prisons.

Not all groups produced comments under all headings, and views may not necessarily be based on comprehensive knowledge of Project initiatives or objectives. Selected quotations are included for illustrative purposes. The frequency in which themes and issues were raised is indicated by the font used in the following tables. Where four or more participants made the same point, the theme is written thus: **HEALTH DAYS**; for three participants thus: **Includes staff and families**; for two: **Raising awareness**; and for one: literature.

One additional focus group was held with the dental team (dentist, dental nurse). This followed a different structure, with most content based on the dental team's work and their perception of the oral health of prisoners. This material has therefore not been combined with that from the other groups, but is presented separately at the end of this technical report.

## Results

### 1. Staff perception of the purpose and activities of the Project

Staff members saw the purpose of the Project as promoting healthy lifestyles and diets, improving oral hygiene, affecting oral health-related behaviour and increasing prisoners' responsibility for their own health. Overall, staff were aware of a range of activities associated with the Project. These include health days and other one-off events, and free resources such as toothbrushes, toothpaste, key rings and water bottles. The Project was also seen to include a range of health education and oral health awareness activities and material. Its relevance to prisoners, staff and families was acknowledged. Table 3.1 reflects the comments made concerning Project initiatives.

**Table 3.1 Awareness of Project purpose and activities: staff views**

<ul style="list-style-type: none"><li>• <b><u>HEALTH DAYS/SPECIAL EVENTS</u></b></li><li>• <b><u>Includes staff and families</u></b></li><li>• <b>Promoting healthy lifestyles/diet</b></li><li>• <b>Improving oral hygiene/behaviour change</b></li><li>• <b>Increase responsibility for own health</b></li><li>• <b>Health education</b></li><li>• <b>Raising awareness</b></li><li>• Literature</li></ul>
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Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

### 2. Importance of oral health for prisoners

Staff thought that prisoners generally considered their oral health and the availability of healthy diet options to be very important. However, staff also indicated that prisoners often arrived in prison with poor oral health and oral hygiene. This particularly applied to prisoners with a history of drug misuse, who staff felt place little value on good oral health and oral hygiene. Many of these prisoners appear to blame their poor oral health on the effects of methadone.

The co-existence of generally high importance placed on oral health by prisoners with their poor standard of oral health was explained by some staff as being due to inadequate access to the prison dental service. Table 3.2 summarises these views.

**Table 3.2 Perceived importance of oral health for prisoners: staff views**

- **Important to address issue of access to treatment within prison**
- **High importance**
- **Prisoners arrive with poor OH and hygiene**
- **Many prisoners rate OH and oral hygiene low – effect of methadone**
- Importance of healthy options in diet

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

### 3. Staff views of the delivery of the Project

Overall, staff participants viewed the Project's approach positively. They approved of how oral health-related information and messages were not imposed or pushed onto prisoners but rather conveyed through dialogue with prisoners. Similarly, the Project was seen to have promoted a team approach which addressed and reduced barriers to service provision. At the same time, it was felt that the Project appeared to have worked despite prisoners' problems accessing treatment.

Overall, the Project was perceived as ground-breaking and having achieved a high level of prisoner awareness and involvement. It was acknowledged that the Project addressed health problems that were relevant to prisoners' lifestyle and habits. It was viewed as having given an impetus to the introduction of other health-related resources and activities. One staff member thought prisoners were more likely to accept oral health-related messages delivered by the Project staff rather than by Prison Officers. Participants also mentioned that prisoners preferred one-on-one talks to group delivery settings. Most importantly, the delivery was seen as flexible and adaptable to individual prisoner's needs. One staff member suggested that to further improve the Project, more family oriented work might be needed. Another indicated that staff do not know how to access oral health resources, including toothbrushes and toothpaste.

Table 3.3 shows the frequency in which these views were offered.

**Table 3.3 Delivery of the Project: staff views**

<ul style="list-style-type: none"> <li>• <b><u>BENEFICIAL, POSITIVE IMPACT</u></b></li> <li>• <b><u>Change, info not imposed or pushed, but based on dialogue</u></b></li> <li>• <b><u>One to one preferred by prisoners over group talks</u></b></li> <li>• <b>Project high visibility and involvement</b></li> <li>• Promoted a team approach, reduced barriers</li> <li>• Ground-breaking</li> <li>• Project impetus for introducing other activities health resources e.g. dietician</li> <li>• More family orientated work needed</li> <li>• Prisoners more likely to accept OH messages from HPO than from Prison Officers</li> <li>• Battling lifestyle, drug risk-factors. Problems happening on the inside started on the outside</li> <li>• Worked despite prison dental service access problem</li> <li>• Difficult to address poor OH due to drugs, lifestyle</li> <li>• Staff don't know how to access supplies</li> <li>• Helps embed the Project in the prison culture</li> <li>• Can be flexible, adapt to need to explain</li> </ul>
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Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

## 4. Review of Project initiatives and tactics

### a. Distribution of toothbrush/toothpaste packs

Focus group participants approved of the distribution of toothbrush and toothpaste packs, on the basis that they increased motivation and promoted behaviour change. These packs were also felt to give prisoners incentives to engage with the Project, and were a better quality product compared to the prison issue toothpaste and brushes. The following quotes are illustrative:

‘That’s the only way you get them coming, for nothing they would not turn up.’

‘She pointed out the actual free jail toothpaste they get is actually quite good and that went down really well because I think it took away the stigma that some guys felt using that as opposed to buying the expensive stuff - but they love the freebies, absolutely love it.’

One staff member also liked the fact that these packs were also distributed to prisoners’ families. Table 3.4 shows the frequency in which these views were given.

**Table 3.4 Project toothbrush/toothpaste packs: staff views**

- **Prompts behaviour change**
- **Increases motivation**
- **Need incentives**
- **Better quality products**
- Can’t afford regular brands
- Also distributed to children - links families

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

#### **b. Distribution of written material**

Staff felt that written materials were used and appreciated by prisoners because they addressed their actual needs.

‘You can always tell at induction what information is left lying on the seat and what’s not, and her stuff always were taken away, which was good.’

This material was also accessible by staff who could therefore also benefit.

Staff emphasised the importance of succinct, understandable and frequently changed written material. Where possible, a stepped approach to access information provision was suggested, where additional information on a topic is made available to prisoners if needed. It was also felt that the HPO had access to new and better quality resources and services than was routinely available within the SPS.

While the written material was helpful, staff emphasised that having a person to deliver health messages was needed. Relying solely on written materials may not enable prisoners to fully take the health messages on board.

‘A lot of people just glance at them rather than stop and read them.’

Table 3.5 summarises these points.

**Table 3.5 Staff views on Project written material**

<ul style="list-style-type: none"> <li>• <u>Important that resources are frequently changed</u></li> <li>• <u>Being non-SPS (i.e NHS Service): access to new, better quality material, NHS service</u></li> <li>• <u>Impacts on staff too</u></li> <li>• People do pick up leaflets especially when relevant to something they are experiencing</li> <li>• Tie-in with diet options and fitness worked well</li> <li>• Having a person deliver the message is more engaging</li> <li>• Prisoners don't take in the message</li> <li>• Message short succinct; easily accessible</li> <li>• Stepped approach where additional info can be accessed if needed</li> </ul>
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Key : **bold**=two similar comments under this theme; bold= three; **BOLD**=four or more.

### c. Talks with new prisoners in National Induction Centre

Focus group participants thought it a good idea to approach new prisoners in the NIC as part of the Project. This provided an early introduction to health promotion and helped to embed the Project in the overall prison system. Caveats were raised with respect to the danger of overloading prisoners during the induction period. Table 3.6 shows the frequency in which these views were given.

**Table 3.6 Talks with new prisoners during induction**

- **Gives early introduction to health promotion**
- **One-to-one preferred by prisoners over group talks**
- **Need to be carefully paced to avoid overload**
- Helps embed the Project in the prison
- Can be flexible, adapt to need to explain
- Need to be prepared for 'daunting' discussions

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

#### **d. Link-up with events and groups e.g. father-child programme**

Focus group members highlighted the cascading effect of working with prisoners on oral health, whereby messages could also impact on prisoners' families. The father-child sessions were mentioned as an excellent example of this aspect of the Project. Participants also emphasised the delivery of this work, in terms of the engaging nature and diversity of activities offered. This also allowed for added interaction of prisoners and families with the prison staff, as described below:

'Once she (started the Project) comes to see us and she organises different events here throughout the year and different themes and ... a lot of the prisoners get to know her through ... different fund raising activities events and stuff so we are getting to know her through that.'

Table 3.7 summarises these comments.

**Table 3.7 Staff members' views on link-up events**

- **FAMILY WORK CASCADES MESSAGES OUT TO FAMILIES**
- **Engaging, varied activities**
- **Promotes father-child bond**
- Added interaction with staff

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

### e. Work on diet, healthy eating choices

Staff felt that the Project had some tangible impact on prisoner behaviours and the prison environment. They thought that group work led to more healthy food choices and prisoners overall appeared to be healthier and fitter. Additionally, the catering menu had changed dramatically (due in large part to the catering manager) and links had been drawn between diet and fitness through gym events.

The costs associated with healthy food options remain a challenge for both the prison and prisoners. Even if healthy food options are available, it remains difficult to change the dietary habits of adults:

‘Problem is to try and change the eating habit of a grown man, they might not really want to do that – that’s the side you are trying to change.’

Table 3.8 gives a summary of these comments.

**Table 3.8 Success and challenges of healthy food options: staff views**

- |  |
|--|
| <ul style="list-style-type: none"><li>• <b><u>More now choose healthier menu options</u></b></li><li>• <b><u>Prisoners now healthier, fitter</u></b></li><li>• <b><u>Cost of healthy options a drawback (to service as well as to prisoners)</u></b></li><li>• <b>Menu has changed dramatically</b></li><li>• Link-up between diet changes and gym events</li><li>• Improvement predates Project</li><li>• Hard to change adult diet</li></ul> |
|--|

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

### f. Work around oral cancer and smoking cessation

Staff were of the opinion that the Project oral cancer and smoking cessation work had increased the awareness and even changed the behaviour of some prisoners and staff. Some of this success was attributed to the way these sessions were delivered but also the nature and quality of resources used. Nevertheless, prisoners remain a high risk population and the actual success rate remains small. Engagement of staff is a particular challenge as participation in such sessions was offered outside working hours (Table 3.9).



**Table 3.9 Oral cancer and smoking cessation work sessions: staff views**

- **Changed behaviour of staff and prisoners**
- **Mode of delivery was fun, interactive, innovative, engaging (e.g. DVD)**
- **Written information effective**
- **Raised awareness**
- **Remains high risk population**
- Fewer staff now smoking
- Staff can be hard to motivate, especially outside working hours, but raised interest
- Few influenced to quit

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

## 5. Benefits for prison staff

Although it was recognised that considerable scepticism had been voiced initially, it was felt that many prison staff had come to appreciate the Project. The practical benefits staff could derive from its work was held to be responsible for this:

‘There were loads (of events) in lunchtime and it was fruit laid on and it was screening for your cholesterol, a massage, it was great. It was great for staff to get something back out as well because one thing you find out about prison is everything goes to prisoner’s and see to have that simple thing for staff was great.’

The Project led to an increase in knowledge about oral health and to examples of behaviour change among staff with respect to diet, smoking, advice-seeking, and personal and family oral hygiene habits. Staff also found the written resources helpful. Because of these benefits, participants were eager to ensure that all staff continue to have opportunities to engage with the Project. Table 3.10 gives the frequency in which these views were given.

**Table 3.10 Project related benefits for prison staff: staff views**

<ul style="list-style-type: none"> <li>• <b><u>CHANGED KNOWLEDGE/ BEHAVIOUR OF STAFF RE DIET AND SMOKING RISK</u></b></li> <li>• <b>Changed personal and family oral hygiene habits</b></li> <li>• Written material helpful</li> <li>• Initial reaction from staff: suspicious/ sceptical about benefits. Over time opinions have changed</li> <li>• Now more likely to seek advice</li> <li>• Only some staff attended: can't all attend events</li> </ul>
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Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

## 6. Particularly successful aspects of the Project

When asked to identify particularly successful aspects of the Project, staff emphasised the Project's role in increasing prisoner and staff awareness of oral health issues, particularly through the impact of oral health events. The HPO was seen as playing a vital role in the success of the Project. The HPOs' approach to the Project delivery was appreciated by prisoners as well as prison staff. The following quotes demonstrate this view:

'Certainly from my point of view ... I was happy to facilitate any events that (the HPO) had proposed and I would just support her and facilitate what she was looking for.'

'The prison got along quite well with her and I think she has done her job very well.'

'Yes it's prison we work in, but it's not all about prisoners and I think staff really get fed up always being the ones that don't really matter and what she has done is she has made us feel we matter as well, because she has put on a lot of stuff for the staff as well.'

Participants also felt that the Project was set up well from the start, which made it easier to work with and engage staff. Table 3.11 summarises staff views on successful aspects of the Project.

**Table 3.11** Particularly successful aspects of the Project: staff views

- **INCREASED PRISONER, STAFF AND OWN AWARENESS**
- **EVENTS BENEFITED PRISONERS AND STAFF**
- **HPO TREATED AS SPS STAFF**
- **HPO'S APPROACH, PRESENCE, PREFERRED BY PRISONERS**
  - Set up well from the start
  - Healthy Working Lives award
  - Work with staff
  - Staff engaged – been a proactive approach

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

## 7. More challenging areas

Staff were also asked to identify any areas that remained a challenge to the aims of the Project. Among those mentioned was the failure to improve access to dental care, particularly compared to other healthcare services in prison. The quotes below illustrate this view:

‘All we can do is to say you know I am outside I am not a prisoner and I still wait 3 months, so stop moaning but that’s just a part of being in the prison, you know, but of course they are justified, especially as all other services are so quick for them.’

‘If you’re gonnae encourage guys to take better care of their dental hygiene, be more aware of their oral health and things like that, then you need to be able to support it, you know ... it becomes a kind of pointless exercise if you’re telling the guy to look after his mouth and brush his teeth and when he says to you, you know, like I’ve got problems here, I need to see the dentist and I’m having to wait 6, 8, 10, 12 weeks, sometimes more.’

Staff thought this would negatively affect prisoners’ readiness to engage with oral health related matters. This argument is outlined by the following quote:

‘It’s never gonna be an easy thing ... to approach, you know, because the minute they heard somebody was here discussing oral hygiene, dentistry, or that kinda thing, it’s like, “oh, why?”... guys want to tell you like “I’ve no seen this, I’ve no done this”, ... regardless how slow it was phased in, was always gonna be about, “aye that’s no what we need, we need, d’you know, the dentist in every day, we need this, we need that.” ’

Also mentioned was the overall poor oral health of prisoners and the fact that oral health and oral hygiene were often the result of lifelong habits and behaviours and therefore difficult to address. Linked to this was the challenge for staff to manage prisoners in pain. In addition to prisoner-focused challenges, some were also raised by working within the prison environment. One such challenge was the Project dependence on prison staff to get access to prisoners. This challenge is illustrated in the following quote:

‘You need to initially convince staff, which is just as hard as anything else to convince them to go and then saying to prisoners you should be going to that.’

Other prison-related challenges reported by staff included the lack of involvement of the dental team, the view that no measurable outcomes had been established at the start of the Project, and that there were difficulties engaging some prison staff. Table 3.12 summarises these views.

**Table 3.12 Challenges to the Project aims: staff views**

- **POOR ACCESS TO DENTAL CARE**
- **POOR OH AND DENTAL TREATMENT IS LONG TERM PRE-PRISON ISSUE**
- Prisoners in pain harder to handle for staff
- Dependant on staff to access prisoners
- No link with dental treatment data
- No measurable outcomes established at start
- Sometimes difficult to engage staff
- Staff can do nothing to improve prison dental service
- Poor follow-up of treatment

Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more.

## 8. Legacy and sustainability of the Project

Asked to comment on if and how the Project's work should be carried forward, staff were convinced that the Project should be continued beyond its three-year lifespan. The following quote presents one reason for this:

'We have a never-ending, you know, chain of guys coming through here who, access the service. If that gets forgotten about - you know, the promotional side of the health issues, you know, oral hygiene, whatever it may be, diet, that kinda stuff - the minute that gets forgotten about, wi *these* guys, *they'll* forget about it, you know. They all go back to, just being easy, what's easiest for them is to get up and have a, you know, buy their rubbish.'

Sustainability was felt to be a challenge which needed to be actively addressed. Suggestions included establishing links with the dental services, making oral health initiatives permanent, on-going or at least a regular feature within the prison, and demonstrating its cost-effectiveness. This aspect is addressed by the following quote:

'I can actually say hand on heart right now that for the staff and prisoners both at Shotts, there has been a benefit. It's whether we can maintain that benefit all the way

through. If they can do it through the whole prison service I think there is a saving at the end of it which is people's health – THE most important. Secondly – is monetary, because you won't be getting these people that are ill.'

Other challenges relate to affordability issues. These include resources for oral health events and available finances for the prison and prisoners to pay for healthy options. Another challenge was staffing. This included allocating responsibilities, resourcing staff events and expanding the Project by including additional professions, i.e. hygienists or dieticians, or generally expanding health promotion activities. These challenges were felt to be taken into account as part of the transition of health care responsibilities from the SPS to the NHS in November 2011.

Aspects of the Project which were felt should be continued included using a collaborative and supportive approach to the Project delivery (as opposed to imposing changes). Further discussions were warranted with respect to whether the Project should be delivered through an SPS or NHS appointment as both were felt to have potential advantages and disadvantages. Table 3.13 provides an overview of comments regarding sustainability.

**Table 3.13 Sustainability of the Project: staff views**

<ul style="list-style-type: none"> <li>• <b><u>SUPPORT FOR SUSTAINED PROJECT</u></b></li> <li>• <b><u>Link HP to better dental service</u></b></li> <li>• <b>Cost-effectiveness needs to be measured and proven</b></li> <li>• <b>Based on dialogue and prisoner/ staff/ management involvement</b></li> <li>• <b>For some staff HPO's non-SPS status was a barrier</b></li> <li>• <b>Emphasise self-responsibility</b></li> <li>• <b>NHS ultimately has responsibility</b></li> <li>• <b>Changeover will improve prisoners' perception of prison health service</b></li> <li>• <b>Develop a wider HP programme</b></li> <li>• <b>Some barriers as a result in accessing resources</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b><u>Sustainability in doubt post-Project</u></b></li> <li>• <b>Make initiatives permanent, on-going, regular</b></li> <li>• <b>Advantage that HPO was not SPS – prisoners listen more</b></li> <li>• <b>Supportive role as opposed to imposing changes</b></li> <li>• <b>Small increase in spending allowance/pressure on resources for health improvement</b></li> <li>• <b>Add hygienist role to dental team</b></li> <li>• <b>Difficulty of working in prison acknowledged</b></li> <li>• <b>Maintain staff events</b></li> <li>• <b>Loss of Project would put pressure on dental service</b></li> <li>• <b>After changeover service will still not be comparable to community service</b></li> </ul>
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Key : **bold**=two similar comments under this theme; **bold**= three; **BOLD**=four or more

## 9. Views of the Prison Dental Team

The dental team defined the Project as giving diet and oral health advice, running oral health related events and offering discussions about the need for dental treatment. They recognised the need for Oral Health Improvement because of the high need for restorative care amongst prisoners:

‘Maybe a slightly younger prisoner clientele here so they’ve got slightly more teeth here which in turn means more holes and more fillings.’

The dental team received direct and indirect feedback from the prisoners about the Project. This included the prisoners being more aware of good brushing techniques, had an appreciation of soft tissue as well as oral cancer problems, which is vital for this high risk group. This approach also afforded prisoners with opportunities to discuss their own and their families’ oral health and the oral health care system in the prison. The following quote outlines the benefits for this for prisoners:

‘Quite often they feel like their support system’s collapsed and like a number almost. Whereas if they get somebody actually speaking to them one-to-one and actually taking a bit of active interest in their health they could motivate them a lot more.’

The dental team hoped the Project might result in a reduction in demand for dental treatment:

‘It makes our job a lot easier as well because if they’re taking care of their own teeth obviously less work’s required, we can get through it bit quicker, get the waiting list down and less emergency pain appointments to slot in.’

Generally, they saw the oral health status and self-care skills of prisoners in Shotts as comparable to prisoners in other institutions. They recognised the level of dental services offered was inadequate, and felt that two or two and a half days of dentist time were needed to address the oral health issues of prisoners in Shotts, particularly in order to establish a routine check-up system that is equal to the existing demand and waiting list.



The dental team agreed that the Project toothbrushing pack was of better quality than the prison issue one and generally welcomed the variety of resources used. However, they felt that links between the Project and the dental service had been poor:

‘I started here in August and I didn’t know (the HPO) or her role even existed till I went to the SPS conference in November and she was there, that was the first I knew ... Nobody here had said to her, we’ve got another dentist. We didn’t really cross wires and so, I think if there was a bit more. Like at (another prison) there’s a lot more, like ... there’s co-operation between oral health and we were a massive part in the oral health wellbeing day there whereas here, it’s been an outside role.’

Other challenges faced by the dental team include queue jumping by prisoners:

‘We get a lot of referrals from the nurses saying ... “they need an appointment – could he see you straight away as an emergency?” And then they come in and they’re like “my filling’s came out.” ’

‘There is a lack of honesty as well when they’re putting them through, trying to triage system in, and it falls down because they think that if they say – say they’ve chipped a tooth and it’s not sore at all, if they say “oh my face was really swollen, I’ve not slept in weeks.” And that’s obviously a problem as well. Prisoners fail to take responsibility for oral health – rely on restoration.’

With respect to the legacy and sustainability of the Project, the dental team highlighted the need for more funding and service hours and expanding the oral health team i.e. including a hygienist.

## 8.4 Technical Report 4

Themes from one-to-one interviews with Project steering group  
members

One-to-one interviews with four SPS and four NHS Lanarkshire Project board staff, with a total transcript time of 5 hours, 39 minutes. Some content is common with that covered by staff focus groups (TR3) and some themes that have emerged are similar. Equally, the one-to-one interviews also cover issues relating to inter-agency working, dealt with in Technical Report 5. Given the small number of participants, themes reflecting the view of one person are included. It was agreed that in order to maximise the utilisation of this material, quotes would be identified as originating from SPS (blue text) or NHS (green text) managers. Respondents were given the opportunity to check the edited transcript of their interview prior to its incorporation into this report. Quotes assigned to particular headings may also be relevant to other themes.

### **1. Managers' perceptions of the overall approach taken by the Project**

The most common theme to emerge, referred to by both SPS and NHS managers, was that the Project had a broad remit, a holistic/whole setting/environment approach, embracing prison policies and health promotion, and not just health education.

'The approach was very much about trying to cover in as much a holistic sense as possible the whole kind of issue around people's life style environment and what makes them more or less likely to look after their oral health and also ... permeate ... infrastructure of an environment in a way that would have a longer life in terms of sustainability of the messages and the kind of developments that we might have taken over the life of the project.'

'Really try and embed health improvement principles into the prison and I don't know if we managed to do that.'

The second shared theme under this heading was that the Project was an attempt to change behaviour, attitude and knowledge.

'(The HPO was) part of wider implementation groups so bigger influence than just dental, she did some other health promotion initiatives not in your face in relation to dental stuff but influencing all the time depending on what group she was in or whether it was one-to-one, but not in a clinical way.'

As in the staff focus groups, SPS managers emphasised the challenging, high need population which the Project targeted, including substance misuse, poor self-care.

‘We have a population whose oral health is poor for all sorts of demographic reasons and so on. But we spend our time, in terms of service delivery, just reacting to improving dental health rather than actually trying to impact on state of dental or oral health.’

SPS managers hoped the Project would raise OH standards and so reduce treatment demand.

‘Self-interest - wanted to see the dentist list down as well.’

‘It was not just piecemeal kind of work it was about more preventive and sustainable piece of work that hopefully would last longer than the Project.’

Other themes mentioned by SPS managers were the aim to ensure sustainability, and that the Project was relevant to prisoners in different stages of sentence.

NHS managers mentioned a number of challenges to the Project. These included the delivery of these planned aims, in particular establishing changes which support a settings approach to health; that these aims were not necessarily fully shared by the two institutions, resulting in different ambitions for the Project; that the environment proved more challenging than anticipated, and that problems in engaging staff were not anticipated.

‘Huge challenges even just to get people engaged and staff engagement has been mammoth (challenge) within the prison.’

## 2. Importance of oral health for prisoners.

There was consensus that poor oral health (OH) is a product of personal background, and a good indicator of wellbeing, a boost for self-esteem and confidence, and prisoners' motivation to improve health and fitness.

'It's of paramount importance because good oral health is indicative of, and then relates to, so many other aspects of the person's life ... their background, their history, their level of education, their level of understanding of health related messages, lifestyle, so on. But it also affects them in the present and in the future in terms of their self esteem and their ability to for example be comfortable in terms of dealing with people – professionals, family members, to take visits, look presentable, to have any kind of self respect.'

'Self-evaluation; improve how they look; fix what's wrong'.

SPS managers took this further and linked OH and behaviour to the possibility that re-offending may be improved.

'They are actually directly related ... about your lifestyle why you have got that kind of poorer oral health and your propensity of offending, you know, so for me there is a bit about, you know, self respect, self esteem, pride, pride in your appearance, pride in who you are as a person and hopefully some kind of internal change process.'

The challenges to this work were: that oral health was a low priority for prisoners (mentioned by two managers from each agency), and one SPS manager said that the challenge to improve oral health was made greater by long waiting times for treatment.

### 3. Review of Project initiatives and tactics

#### a. Distribution of toothbrush/toothpaste packs

Positive themes include the increased involvement that 'freebies' can bring, the fact that it can lead to changed behaviour and increased self-confidence, that the tactic exploited the poor reputation of prison issue products, and the low priority placed by prisoners on such purchases when left to their own devices.

'If there is kind of something tangible in it for them as well you know they are perhaps more likely to engage with the process so those approaches for me worked very well ... I think it was a 'buy in.'

'Prisoners by their nature love a freebie, but what value they put on a freebie I am not hundred percent sure. If we give them free toothpaste and toothbrush there is more chance that they use it. I think the problem with that is it's short termism, Once it's finished it's finished.'

This criticism was echoed by an NHS manager, who said that investment in toothpaste and toothbrush packs was not planned, and did not meet the aims of the Project. However she felt it was a necessary measure to improve OH behaviour.

#### b. Distribution of written material

Four managers across both agencies agreed that Project written material was effective, varied, and tailored to environment and prisoner tastes.

'I think it's a bit being clever ... rather than saying here is a leaflet that somebody might think oh that's nice read them once and put them in the bin but something of use to you, something that has practical implement, an object like a coaster or a mug or something like that people are gonna use and constantly have.'

The limitations to this approach were felt to be that it represented a health education approach at odds with Project's emphasis on a whole setting approach, and that literacy issues reduced the impact of written material. One NHS manager commented:

‘There is such a strong reliance on health education throughout the whole project; I think that’s been a real disadvantage’.

### **c. Talks to new prisoners in NIC**

Five managers argued that this tactic exploited a good opportunity to get OH messages across at an early stage.

‘Everyone who comes in that door will at least have that initial message and they take away you should give them toothbrushing packs, and things like that, at that point as well.’

‘There is a bombardment of information but I actually think that a lot of that will be boring for prisoners where as things like the info that (the HPO) provided will probably be some light relief even though there is strong message on it.’

However, one NHS manager felt interactive group work was more productive.

‘When you get in a one to one with people, what they want to do is talk about their own dental health and it becomes very clinical and it’s very hard to switch that back round into health improvement advice.’

Other limitations to this approach that were mentioned were: it was labour intensive, that a one-to-one approach at dental chairside might be better, that there was no mechanism to ensure sustainability, and it risked information overload.

‘I am not hundred percent sure that the biggest thing in their mind early doors into that sentence is how do I keep my teeth clean ... I am not sure how effective it is sitting talking to someone with a 35 year sentence and tell them the value of cleaning their teeth is going to be.’

The same manager wondered whether such effort might be better targeted to prisoners reaching the end of their sentence.

#### **d. Input into existing groups, e.g. father-child sessions**

Managers from both agencies agreed that this approach had a high impact, gave an opportunity to strengthen the father-child bond, and so ease Project engagement with family.

'I think it's a clever approach ... whilst their father as parent educator is involved in the process, he must be observing some of this message himself as well, you know, it's good to tell my son and daughter this therefore it must be a good thing, you know . Because it must be hard sometimes with distance from your family to comfortably engage in a meaningful conversation.'

'His family is the most important thing in his life and they like the idea of that (the HPO), through visit operations officers here, there has been fruit, posters and coasters and information leaflets, because I think they see that as a chance to say (to their kids) I am telling you how to eat, how to look after your dental hygiene.'

Limitations felt by NHS managers were that health improvement at an individual level may be less effective than in healthcare setting, that it was highly dependent on SPS staff support, engagement for sustainability, and that there was a mismatch of hours with activities (e.g. Saturday visits). However, the initiative was felt to have developed to become more interactive and not taught.

#### **e. Work on diet and healthy eating choices**

There was less consensus regarding the Project's impact on healthy eating. Two managers from each agency commended the non-directing, low pressure approach adopted, which avoided raising resistance, and exerted a subtle influence on diet. It was felt to have resulted in a change in the availability of healthy options.

'The healthy eating stuff, she has distributed fruit to the prisoners its again a freebie but it's actually more than the coasters it actually helped them because it's providing nutrition and it was actually showing people look if you spend some money buying this it's better than buying sugar and sweets and things.'



For one NHS manager, it represented the Project's only success in changing the prison environment towards one supportive of health improvement.

Considerable limitations were cited. These were that it was an uphill battle to influence diet, that junk food may be used as currency, that the programme was fragmented, had an unknown impact on dietary choices, that sustainability was dependent on the support of motivated staff, and that improvements in catering were already underway pre- Project.

'The prisoners really did not buy into it, they did not want the fruit at visits so although the initiative moved forward the uptake of that initiative was very very small from prisoners.'

'They're very much set in their ways ... all the kind of things we love but are not good for us like chips and sweets and fizzy juice. It's hard to break the culture and bear in mind as well that a lot of cultural aspects of living in a prison as a prisoner involve those kind of commodities as (barter)... as you may well pay off a debt with a bottle of fizzy juice or a Mars Bar ... if you try and permeate through that culture it is difficult.'

#### **f. Work around oral cancer and smoking cessation**

There was a level of consensus among the two agencies that this area of work provided an example of how the Project was integrated with other agency working (smoking cessation), employing a multidisciplinary approach. One SPS manager felt this represented the most important element of the Project given the high risk behaviour of prisoners.

'Project has undoubtedly impacted on people, you know, and I am not measuring that - that is quite difficult but when you start to look at all the behavioural aspects and things like that and the feedback from people, you just have to see something is getting clearer, you know.'

'I think backing up (smoking cessation and patches) with (the HPO) showing them some of the risks, that's a positive aspect, joining the two services up.'

Other benefits mentioned by SPS managers were that it addressed the under-stressed OH aspect of smoking cessation, that effective visual aids and a variety of approaches were adopted, that it fitted health promotion theory by a tailoring approach to clients and providing a whole system approach which impacted on both staff and prisoners.

In respect to challenges to this approach, one SPS manager felt that it needed to be recognised that impact will be limited, as with smoking cessation generally. NHS managers pointed out that the necessity of managing the work from outside the prison environment, and the dependency on establishing and maintaining staff relationships inside prison, were barriers to progress; that sometimes the (NHS) management input into the development phase of materials was minimal. This work, as with other aspects of the Project, was restricted at times by staff availability and, as a result, unreliable access to prisoners.

#### **g. Work with prison staff**

The consensus among participants was that this was an important aspect of the Project, but one which had been met with limited success. The following comments from SPS managers reflect their view that it was essential to have a broad remit, and that this pre-empted any resentment among staff that the focus was only on prisoners.

‘We actually designed the bid around prisoners, staff and prisoner’s family so it was kind of a tripartite set of stakeholders I suppose we were aiming at so that was pretty clear that we would try to achieve that.’

‘Getting involved with staff has been a massive positive because they started to see that it is actually for us as well and it’s helping us and get involved in the health promotion days and get involved with some literature with the staff.’

‘I think it would be ethically incorrect not to have it. I don’t think it would be very responsible, I think it something that has to be tackled and the success will be taken into consideration as far as I am concerned.’

It was pointed out that this had led to the prison gaining the *Healthy Working Lives* Bronze award towards the end of the Project.

However managers from both agencies felt that staff engagement had been limited or mostly unsuccessful, and that some staff had rejected engagement in the Project. The view that at times SPS management had not taken a lead to promote staff engagement was expressed from the NHS side.

‘We were relying on Healthy Working Lives as a vehicle to do that, to start and it never really got off, off the ground.’

‘But certainly we’ve struggled with Prison Officers and I don’t know if it’s because they just don’t think it’s their role, they don’t understand what health improvement is, they don’t value health improvement.’

Asked what they felt staff had gained from the Project, if anything, the consensus was that gains were real, but limited. Managers from both agencies agreed that knowledge and understanding of the concept of health improvement was better understood by some, especially those who have worked with the HPO. However NHS managers felt there was no evidence of overall health improvement, that the healthy environment was not well understood, and that participation in Healthy Working Lives was low. For some this was felt to be because the Project was sponsored by an outside agency.

### **3. Particularly successful aspects of the Project**

Managers were asked to identify particularly successful elements of the Project, as well as areas that were less successful or more problematic. The following areas were highlighted as successful, with black text indicating points raised by both SPS and NHS managers:

- Impact on oral cancer, despite small numbers.

‘I think backing (smoking cessation and patches) up with (the HPO) showing them some of the risks, that’s a positive aspect, joining the two services up.’

- Impact on staff.

'I think staff are aware of the Project, they certainly are aware of the food initiative and stuff like that, some of them have obviously worked closely with (the HPO), not everybody in the prison, so they will be more aware.'

- Father-child activities: innovative, engaging, parenting skills.

'To get a father something back to say to his kids to say this will help you, that's an overarching thing that I would say what worked best I would say that.'

'For *National Smile Month*, she looked at growing vegetable plots with the father and the child group, and it was strawberries and things like that, and I thought that was really lovely idea to get the message across about healthy eating and fruit, but also giving something for the father and the child to do together, and so things like that eh, I thought have been fantastic ... cos there's this extra motivation within the prisoners who have maybe young children.'

- Healthy eating activities.
- Work in National Induction Centre (NIC).
- Getting people to participate.
- Group work, increasing motivation within groups.
- Increased knowledge/awareness in prison staff led to increased participation/contribution.
- OH presence in general health-related events, targeting prisoners and staff.

#### **4. Challenges and limitations.**

Managers from both agencies mentioned the limited engagement of prison staff as one of the less successful aspects of the Project. Other issues raised by NHS managers were:

- That no evaluation had been planned from outset, limiting the evidence of effectiveness and undermining sustainability.
- Other groups of prisoners shouldn't be ignored: identify ways of engaging and identify their motivations.

- Sustainability: opportunities identified but no further action at this stage.
- Time/ resource (staff) to deliver the programme.
- Prison structure/regime/culture: senior management framework limits progress.
- Lack of a link to clinical input/ appointment, and inadequate clinical service.

## 5. Building on the Project

Leading on from this, respondents were asked what they might change, and what the challenges and opportunities were for future OHI work in the prison. Responses to these questions and the challenges identified previously give the following list of suggestions:

### Scope and settings

- Health improvement is more accepted in prison now after establishing potential through the Project – inform future direction.
- Broader health promotion role may not work.
- Be less ambitious in range of target groups.
- Consider whether pre-release prisoners may be more appropriate target.
- Project initiatives may be appropriate in other settings e.g. young prisoners.

### Staff

- Recognise issue of low staff participation in Healthy Working Lives initiative.
- Teach trainee Prison Officers re self-esteem and oral health to spread the message.
- Drop the staff element.

### Dental Service

- Improve link with clinical service.
- Improve dental service, possibly by re-directing Project funds.
- Drop the dental service/referrals objective.

### **Management and administration**

- Establish early and sustained dual management involvement.
- Integrate Project better to management structure, prison culture.
- Ensure adequate resources.
- Continuity of staff important.
- Implies cross-boundary working.
- Recognise that agencies may have different priorities.

### **National context**

- NHS takeover will improve NHS Lanarkshire profile and representation in prison.
- Develop Project within a national Project strategy for prisons.



## **8.5 Technical Report 5**

Outcomes of the Nuffield Partnership Assessment Tool



## Methods

NHS and prison staff involved in the Project also completed the Nuffield Foundation's interagency working questionnaire<sup>10</sup>, a well-established management and research tool designed to record the views of partners regarding the extent to which the building blocks for successful partnership are in place. It is based on six Partnership Principles, each with six component elements, on which participants are asked to numerically score their agreement or disagreement on how well it has been achieved. A score of four indicates strong agreement, and one strong disagreement. A copy of the Nuffield Partnership Assessment tool including its principles and elements is appended to this report. The maximum score possible for each of the six principles is 24. This would indicate participants' strongly agreeing that partnership was working well across all principles. The minimum possible score is 6, which would indicate that participants do not think that partnership is working at all. The Nuffield questionnaire manual suggests that an individual score of 19 or above for any one principle indicates good interagency working. Scores between 18-13 indicate generally good interagency working with some areas needing further attention or exploration.

Participants were also asked to rate each principle in terms of its importance, and the extent to which the Project was achieving its aims and objectives. A final question asked participants to rate if the Project was achieving its aims and objectives on a four point scale from four (strongly agree) to one (strongly disagree).

## Results

Overall, the achieved aggregate partnership score resulting from the Nuffield Partnership Assessment Tool was in the highest possible score range (Table 5.1). This indicates that the people involved in the Project were working well together.

NHS participants' partnership scores were slightly higher than their SPS counterparts, with SPS participants indicating that some areas of the partnership working related to the Project may need further exploration and attention.

**Table 5.1      Nuffield Partnership Assessment tool: Aggregate scores**

	<b>Aggregate Partnership Score</b>	
	<b>Mean</b>	<b>Median</b>
<b>Across all participants (n=8)</b>	110.13	111.5
<b>NHS (n=4)</b>	115.00	115.5
<b>SPS (n=4)</b>	105.25	109.50

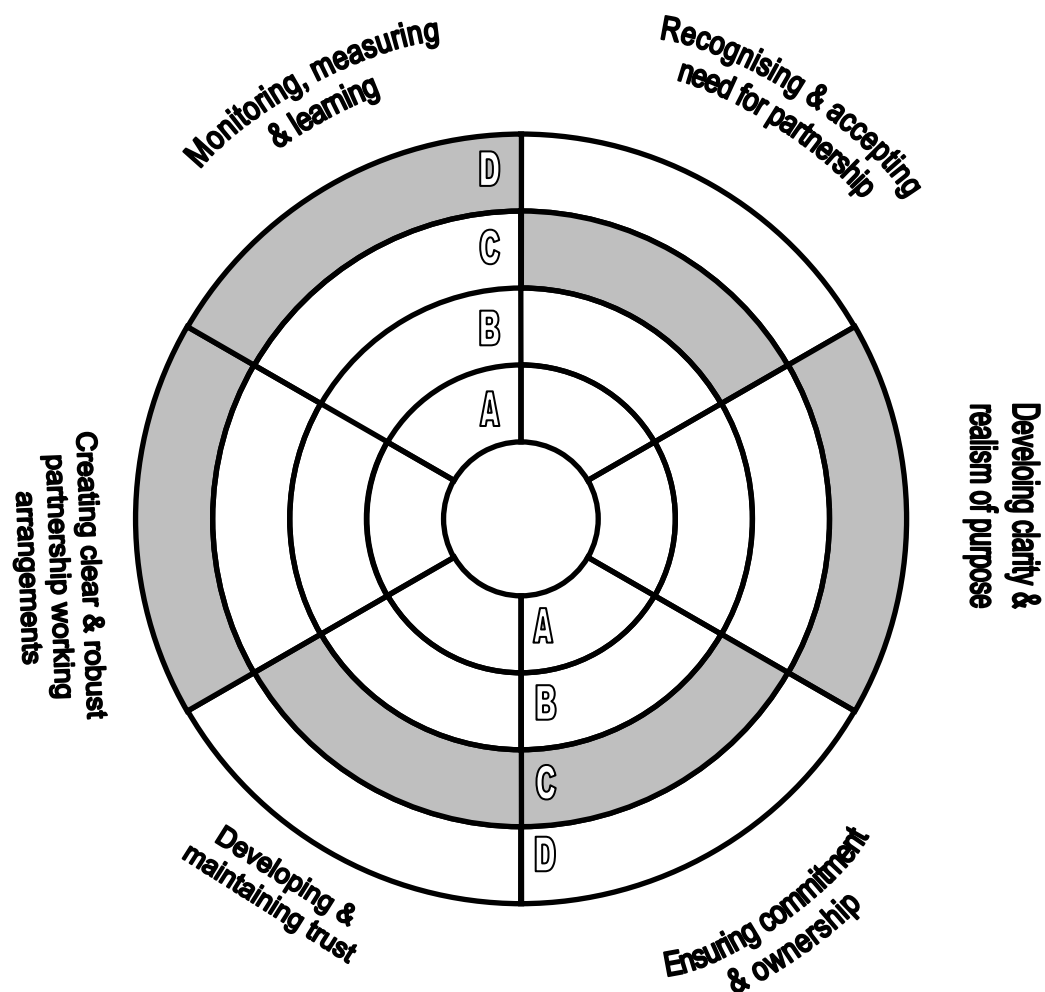
**Legend:**

109–144: The partnership is working well enough in all or most respects to make the need for further detailed work unnecessary.

73–108: The partnership is working well enough overall but some aspects may need further exploration and attention.

The Nuffield Assessment Tool also allows for a more detailed analysis into six different partnership principles. Figure 5.1 gives an overview of the partnership scores across all participants and principles. Three of the six partnership principles were implemented to a degree that satisfied the participants. These principles relate to the clarity and realism of the Project's purpose, the partnership arrangements and the monitoring, assessment and learning procedures. The shaded areas in Figure 5.1 indicate the respondents' overall scores across all partnership principles.

**Figure 5.1 Aggregate scores by partnership principles relating to the THE PROJECT**



**Legend:**

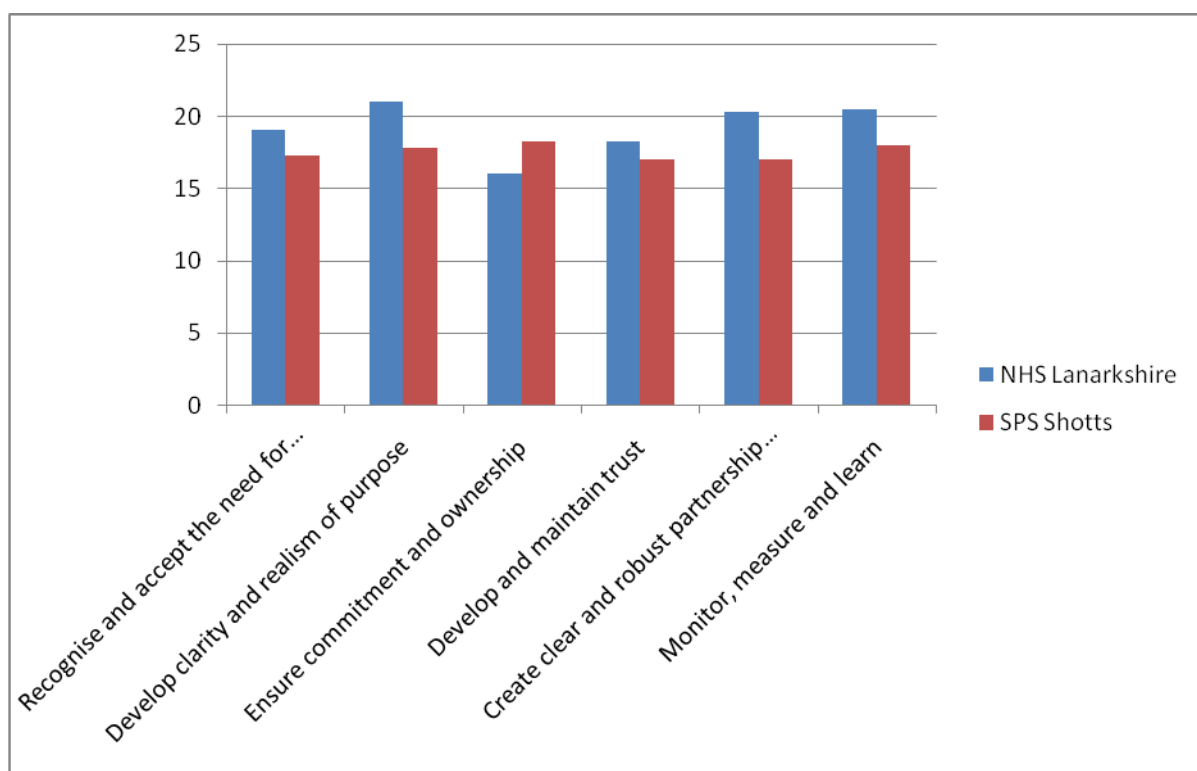
- A. The partnership is working badly enough in all respects for further detailed remedial work to be essential.
- B. The partnership may be working well in some respects but these are outweighed by areas of concern sufficient to require remedial action.
- C. The partnership is working well enough overall but some aspects may need further exploration and attention.
- D. The partnership is working well enough in all or most respects to make the need for further detailed work unnecessary.

With respect to the other three partnership principles, there appears to be some areas that would benefit from further attention. There is some scope for efforts to improve the

recognition and acceptance of the need for partnership working, to ensure commitment and ownership of the Project, and to develop and maintain trust across the people and services involved.

Across the six partnership principles, there were also some differences between NHS and SPS respondents (Figure 5.2). NHS participants scored slightly higher on five of the six principles, whereas SPS participants were marginally more convinced that the Project had sufficient commitment and ownership across the organisations and people involved. It has to be noted, that even the lowest score was well within the range of scores indicating that this partnership aspect was working reasonably well. Indeed, not a single aspect of the partnership received any scores indicating poor or non-existent partnership working.

**Figure 5.2 The Project partnership ratings across six principles**  
(maximum score possible=24: n=8)



All partnership principles were deemed important by the participants. However, it was still possible to rank the principles in terms of the relative importance the participants assigned to them. Ensuring Commitment and Ownership emerged as the most important partnership principle across all participants. This was followed by Creating Clear and Robust Partnership

Arrangements. Developing and Maintaining Trust received the same average score as Monitoring, Measuring and Learning but were deemed less important compared to the first two principles. Developing Clarity and Realism of Purpose and Recognising and accepting the Need for Partnership were deemed second least and least important.

The final question asked participants to rate if the Project was achieving its aims. Seven of the eight participants thought the Project was achieving its aim.

The overall impression, based on the Partnership Assessment Tool, is that the partnership of people and services involved in the Project appeared to have worked well. This is reinforced by each aspect of the partnership analysis process. Participants also felt that partnership working was important, particularly the need to ensure commitment to and ownership of the Project across people and services. Differences between respondents were marginal but still worth noting. Compared to their NHS colleagues, for example, SPS participants were slightly more likely to see room for improvement across selected aspects of partnership working. Finally, all but one participant felt that the NHS-SPS partnership managed to achieve the Project's aims and objective.

## **9. Appendices**

Ethical Approval Documentation

Dental Health Questionnaire and Nuffield Partnership Questionnaire



## **9.1 Ethical Approval Document**



**WoSRES**  
**West of Scotland Research Ethics Service**



West of Scotland Research Ethics Service  
Ground Floor – The Tennent Institute  
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38 Church Street  
Glasgow G11 6NT

Dr Tahira Akbar  
Research Assistant (SOHIPP)  
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Date 21 January 2011  
Your Ref  
Our Ref WoS ASD 516  
Direct line 0141 211 2126  
Fax 0141 211 1847  
E-mail Judith.Godden@ggc.scot.nhs.uk

Dear Dr Akbar

Full title of project: Evaluation of the Shotts Oral Health Programme (ESOP)

You have sought advice from the West of Scotland Research Ethics Service Office on the above project. This has been considered by the Scientific Officer and you are advised that it does not need ethical review under the terms of the Governance Arrangements for Research Ethics Committees (REC) in the UK. The advice is based on a similar project presented within the NHS in Scotland. Your project is dealing with prisoners and staff within HMP Shotts and therefore you are required to take advice from the SPS Research Access and Ethics Committee regarding approval requirements for your study.

- The project is an evaluation seeking the views of prisoners, their families and staff on a service development.
- Recruitment is invitational and responses to the questionnaire are fully anonymous, and transcripts from face to face interviews and focus/discussion groups will be irreversibly anonymised so that the respondent's identity is fully protected
- It is not possible to identify the individual from any direct quotation used in the reporting of your project.

If during the course of your project the nature of the study changes and starts to generate new knowledge and thereby inadvertently becoming research then the changing nature of the study would necessitate REC review at that point, before any further work was undertaken. A REC opinion would be required for the new use of the data collected.

Note that this advice is issued on behalf of the West of Scotland Research Ethics Service Office and does **not** constitute a favourable opinion from a REC. It is intended to satisfy journal editors and conference organisers and others who may require evidence of consideration of the need for ethical review prior to publication or presentation of your results.

However, if you, your sponsor/funder or any NHS organisation feels that the project should be managed as research and/or that ethical review by a NHS REC is essential, please write setting out your reasons and we will be pleased to consider further.

Continued...

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Where NHS organisations have clarified that a project is not to be managed as research, the Research Governance Framework states that it should not be presented as research within the NHS.

Kind regards

A handwritten signature in black ink, appearing to read 'Judith Godden', written in a cursive style.

Dr Judith Godden  
WoSRES Scientific Officer/Manager

**REGULATIONS CONCERNING RESEARCH ACCESS TO PRISON ESTABLISHMENTS FOR  
THE PURPOSES OF CONDUCTING RESEARCH**

All access to prison establishments for the purposes of conducting research is conditional on the researcher(s) agreeing to abide by the undernoted requirements.

1. All data and research material arising out of the study must be dealt with on an anonymous, unattributable and confidential basis. No individual should be named or identified. Researchers must comply with the Data Protection Act (1998).
2. If the study is to involve interviewing of subjects, all such subjects must give voluntary consent and be informed of the purpose of the study; anticipated uses of data; identity of funder(s) (if applicable); and the identity of the interviewer.
3. All research data and material of whatever kind (i.e. interview notes, questionnaires, tapes, transcripts, reports, documents, specifications, instructions, plans, drawings, patents, models, designs, whether in writing or on electronic or other media) obtained from the Scottish Prison Service shall remain the property of the Crown. Information collected during the course of a research project must not be supplied to another party or used for any other purpose other than that agreed to and contained in the original research proposal. All confidential research data obtained from SPS must be destroyed within 12 months of completion of the research project.
4. All researchers must abide by the ethical guidelines of their profession or discipline and must nominate below the guidelines to which they will adhere. (e.g. Social Research Association, British Sociological Association etc.) All researchers must arrange to be Disclosure Scotland cleared.
5. Where appropriate, research proposals may require to be submitted to the Ethics Committee of the local Area Health Board (or MREC) and to receive its approval before access is granted.
6. The Chair of the SPS Research Access and Ethics Committee (RAEC) must be informed in writing and agree to any changes to the project which involve alterations to the essential nature of the agreed work.
7. The Scottish Prison Service reserves the right to terminate access to SPS establishments at any time for any Operational reason that may arise or for any breach by the researcher of the Access Regulations or for any failure on the part of the researcher to conduct the study as agreed with the RAEC. In the event of access being terminated for any reason whatsoever, all data obtained from SPS during the course of the research shall be returned to the Scottish Prison Service.
8. The Scottish Prison Service will not have liability in respect of any loss or damage to the researcher's property or of any personal injury to the researcher which occur within SPS premises. The researcher (or, if applicable, the researcher's institution or organisation) will be responsible for arranging all relevant personal indemnity to cover the conduct of research within SPS premises.
9. It is a condition of access that a copy of any final report or dissertation or other written output arising from the research MUST be submitted to SPS to be lodged in its Research Library. Any material resulting from access which is intended to be presented publicly must also be submitted to SPS. In principle, the Scottish Prison Service supports the publication and dissemination of research findings arising from approved work, but the Service reserves the right to amend factual inaccuracies.
10. Reports and presentations should be sent to the Chair of the Research Access and Ethics Committee, Analytical Services, SPS Headquarters, Calton House, Redheughs Rigg, Edinburgh EH12 9HW.

Ethical guidelines nominated \_\_\_\_\_

I have read the above regulations and agree to be bound by them.

Rum Freeman (Signature)

17/02/2011 (Date)

## INFORMATION and CONSENT FORM for PRISONERS

The NHS has asked Dundee University to report on recent health promotion work here in Shotts prison. We would like to ask for your help to do this.

**What's it about?** NHS Lanarkshire and HMP Shotts have been working together for the last 3 years to try to improve dental health in the prison. The University team now want to see how useful this has been. To do this we need to get prisoners' views and experiences. Will you help us find out what worked well and what needs improving?

**What do you want me to do?** The University team would like you to complete a short questionnaire about dental health and how you look after your teeth. It also covers other health topics which are important for teeth and gums like diet and smoking. **No names will be used**, but we might use what you say as an anonymous quote in our report.

**Will what I say be confidential?** **Yes.** Only the researchers will read your answers – what you say will not be passed on to anyone else. The exception to this is if it becomes clear you may harm yourself or others or disclose any criminal activity.

**Do I have to take part?** **No.** It is up to you. Your care from prison and health staff won't be affected if you decide not to help. And you can change your mind later without giving a reason. Other prisoners are also being asked to help.

**What's in it for me?** You will be given a **toothbrush and toothpaste** as a small thank-you, and if you would normally be at work **you won't lose pay**. What you say may help us come up with ways to improve prisoners' dental health.

**How do I find out more about the study?** You can ask the researcher about the study. When the research is finished a short report will be available in the prison.

Dental Health Services Research Unit, University of Dundee  
HMP SHOTTS ORAL HEALTH IMPROVEMENT PROGRAMME: PRISONER FOCUS GROUPS

**NOW PLEASE SIGN YOUR NAME TO CONFIRM THAT:**

- You have read and understood this information sheet.
- You understand that taking part is up to you, and that if you say no it won't affect your care from prison or health centre staff.
- You understand that the prison will be notified if you indicate behaviour likely to be of harm to yourself or others.
- You have had the chance to ask questions about the study.
- You agree to take part in the study.

Name (print) \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

## **9.2 Dental Health Questionnaire and Nuffield Partnership Questionnaire**

## HMP Shotts Dental Health Project

### Dundee University Questionnaire for Prisoners

This questionnaire is about your dental health and how you look after your teeth.

Your answers are confidential – no names will be used.

Please remember that answers that you give will not fast-track you for a dentist appointment, so if you need one please self-refer as normal.

Most questions just need a tick in a blue box, but some you need to write in.

Thank you for your help.

1. How old are you?

2. How long have you been in Shotts prison?

3. Do you have: (Please tick one box only)

- All your own teeth
- Only your own teeth but some missing
- Only false teeth
- Some false teeth and some of your own
- No teeth at all


4. How often do you clean your teeth? (Please tick one box only)

- More than twice a day
- Twice a day
- Once a day
- Every 2-3 days
- Once a week
- Less often
- Never
- Don't know


IF YOU HAVE FALSE TEETH – please answer these two extra questions

What type of false teeth do you have? (Please tick all boxes that apply)

- Full TOP denture
- Full BOTTOM denture
- Part TOP denture
- Part BOTTOM denture


Do you wear your false teeth?

- Yes
- No
- Sometimes




(please tick one box only)

very quite quite very  
good good fair poor poor

5. How do you rate the state of your teeth?

6. How do you rate the state of your mouth and gums?


7. Do you have any of these problems? (Please tick 'yes' or 'no' for each row)

	yes	no
Loose or decayed teeth		
Sore or bleeding gums		
Pain or discomfort in your mouth		
Mouth ulcers		
Difficulty in eating		
Dry mouth		
Sensitivity when eating/drinking		
Badly fitting false teeth		
Other – please detail: _____		

8. Which of these do you think prevents you from having a healthy mouth in prison?

(Please tick 'yes' or 'no' for each row)

	yes	no
I use tobacco and/or other drugs		
I have too many sugary drinks and snacks		
I don't know enough about how to look after my mouth		
I can't access the dentist as often as needed		
I can't afford mouthwash		
I can't afford my preferred toothpaste		
I can't afford my preferred toothbrush every 3 months		
I can't get access to smoking cessation services		
Other – please detail _____		

9. How often do you have any of the following? (Please tick one box for each row)

	Several times a day	Once a day	2-3 times a week	Once a week	Less than once a week	Never
Sweets						
Diluted juice						
Fizzy drinks						
Sugar in tea or coffee						
Milk (as a drink on its own)						
Water (as a drink on its own)						
Fruit Juice						
Fruit						
Biscuits / Cakes						



**10. Do you smoke?**

(Please tick 'yes' or 'no')

yes	no
<input type="checkbox"/>	<input type="checkbox"/>

IF YES:

How many on average do you smoke in a day?  Cigarettes/roll-ups  Ounces

**11. How much are the statements below true for you? (please circle a number)**

Definitely no

Definitely yes

I receive the dental care I should

1	2	3	4	5
---	---	---	---	---

I need dental care, but I put it off

1	2	3	4	5
---	---	---	---	---

I consider my dental health to be important

1	2	3	4	5
---	---	---	---	---

**12. The following actions all help to keep your mouth healthy: which do you do?**

(Please tick 'yes' or 'no' for each one)

Keep sugary food and drinks to mealtimes

Clean my teeth regularly with a toothbrush and toothpaste

Use mouthwash

Don't smoke

Have a check-up at the dentist every 6 months

Renew my toothbrush every 3 months

**IF YOU HAVE FALSE TEETH:** Clean my false teeth

Leave my false teeth out at night

yes no

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**13. Before you were sentenced, how often did you go to the dentist?**

(Please tick one box only)

When I had toothache or trouble with my mouth

Regularly every 6 months

Regularly once a year

Less often

I never went to a dentist

Other – please detail:

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

**14. When was the last time you saw a dentist? (Please tick one box only)**

In the last month

1-6 months ago

7-12 months ago

Over 1 year ago but less than 2 years ago

Over 2 years ago

Never

Can't remember

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

**Where was that?**

(Please tick one box only)

Shotts prison

Other prison/remand centre

Dental practice or clinic

Dental hospital

Can't remember

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

**15. Since you've been in Shotts prison, which of these messages about looking after your teeth and mouth have you heard about?** (Please tick 'yes' or 'no' for each one)

	yes	no
Cutting down on sugar and sugary drinks		
Cleaning teeth regularly with a toothbrush and toothpaste		
Using fluoride toothpaste		
Using mouthwash		
That smoking can cause mouth cancer		
Getting a check-up at the dentist every 6 months		
Renewing your toothbrush every 3 months		
<b>IF YOU HAVE FALSE TEETH:</b> Cleaning false teeth		
Leaving false teeth out at night		
Anything else? (please detail).....		

**16. Which of these have you done since you've been in Shotts prison?**

(Please tick 'yes' or 'no' for each one)

	yes	no
Seen posters about looking after your teeth and mouth		
Read leaflets about looking after your teeth and mouth		
Been to talks about dental health		
Taken part in activities about dental health – for example in education or father-child sessions		
Gone to special events about keeping healthy		
Talked to other prisoners about looking after your teeth and mouth		
Talked to health centre staff about looking after your teeth & mouth		
Talked to prison officers about looking after your teeth and mouth		
Talked to your family about looking after <b>their</b> teeth and mouth		
Anything else? (please detail).....		

**17. Do you think telling prisoners how they can look after their teeth and mouth is a good idea, or a waste of time?** (Please tick one box only)

a good idea	
a waste of time	
I don't know	

**Why do you say that?**

.....

.....

.....

**18. Is there anything else you think could be done to improve prisoners' dental health?**

.....

.....

.....

**THANKS FOR YOUR HELP**

We would like to use this *Nuffield Assessment Tool* to ascertain from SPS and NHS managers how far they feel the building blocks for successful partnership in Oral Health Promotion are in place. It is based on six Partnership Principles. After you have read the statements for each Principle, please tick the appropriate box to show the extent to which you agree or disagree with each one in respect to the SPS-NHS partnership delivering the Oral Health Promotion Programme. You may wish to add comments or observations in the final column.

<p><b>PRINCIPLE 1. Recognise and Accept the Need for Partnership</b></p> <p>To what extent do you agree with each of the following statements in respect of the SPS-NHS partnership which is the subject of this assessment?</p>	strongly agree	agree	disagree	strongly disagree	Comments
There have been substantial past achievements within the partnership.					
The factors associated with successful working are known and understood.					
The principal barriers to successful partnership working are known and understood.					
The extent to which partners engage in partnership working voluntarily or under pressure /mandation is recognised and understood.					
There is a clear understanding of partners' interdependence in achieving some of their goals.					
There is mutual understanding of those areas of activity where partners can achieve some goals by working independently of each other.					

<b>PRINCIPLE 2.</b>					
<b>Develop Clarity and Realism of Purpose</b>					
Our partnership has a clear vision, shared values and agreed service principles.					
We have clearly defined joint aims and objectives.					
These joint aims and objectives are realistic.					
The partnership has defined clear service outcomes.					
The reason why each partner is engaged in the partnership is understood and accepted.					
We have identified where early partnership success is most likely.					
<b>PRINCIPLE 3</b>					
<b>Ensure Commitment and Ownership</b>	strongly agree	agree	disagree	strongly disagree	Comments
There is a clear commitment to partnership working from the most senior levels of each partnership organisation.					
There is widespread ownership of the partnership across and within all partners.					
Commitment to partnership working is sufficiently robust to withstand most threats to its working.					
The partnership recognises and encourages networking skills.					
The partnership is not dependent for its success solely upon these individuals.					
Not working in partnership is discouraged and dealt with.					

**PRINCIPLE 4****Develop and Maintain Trust**

The way the partnership is structured recognises and values each partner's contribution.

The way the partnership's work is conducted appropriately recognises each partner's contribution.

Benefits derived from the partnership are fairly distributed among all partners.

There is sufficient trust within the partnership to survive any mistrust that arises elsewhere.

Levels of trust within the partnership are high enough to encourage significant risk-taking.

The partnership has succeeded in having the right people in the right place at the right time to promote partnership working.

**PRINCIPLE 5.****Create Clear and Robust Partnership Arrangements**

It is clear what financial resources each partner brings to the partnership.

The resources, other than finance, each partner brings to the partnership are understood and appreciated.

Each partner's areas of responsibility are clear and understood.

There are clear lines of accountability for the performance of the partnership as a whole.

Operational partnership arrangements are simple, time-limited and task-oriented.

The partnership's principal focus is on process, outcomes and innovation.

strongly agree

agree

disagree

strongly disagree

Comments

**PRINCIPLE 6.****Monitor, Measure and Learn**

The partnership has clear success criteria in terms of both service goals and the partnership itself.

The partnership has clear arrangements effectively to monitor and review how successfully its service aims and objectives are being met.

There are clear arrangements effectively to monitor and review how the partnership itself is working.

There are clear arrangements to ensure that monitoring and review findings are, or will be, widely shared and disseminated amongst the partners.

Partnership successes are well communicated outside of the partnership.

There are clear arrangements to ensure that partnership aims, objectives and working arrangements are reconsidered and, where necessary, revised in the light of monitoring and review findings.

**PTO**

**There are now two other important issues we would like you to consider:**

1. How you would weight the six Principles in terms of their current significance for this partnership – given its nature and stage of development;
2. How well you think the partnership is doing in achieving its aims and objectives.

### 1. The Relative Significance of the 6 Principles

It is clear that many, or even most, people completing this assessment will want to say that one or other of the six Principles is more significant – and maybe much more significant – than others, given:

- the nature of the partnership
- the stage of development of the partnership
- your place within the Partnership

Whatever your view please record below what you think is the significance of each of the six Partnership Principles *currently*.

	MORE SIGNIFICANT			LESS		
SIGNIFICANT						
<b>PRINCIPLE 1.</b> Recognise & accept the need for partnership						
<b>PRINCIPLE 2.</b> Develop clarity & realism of purpose						
<b>PRINCIPLE 3.</b> Ensure commitment & ownership						
<b>PRINCIPLE 4.</b> Develop & maintain trust						
<b>PRINCIPLE 5.</b> Create clear & robust partnership arrangements						
<b>PRINCIPLE 6.</b> Monitor, measure and learn						

### 2. Current Partnership Success

To what extent do you agree with the following statement in respect of the Oral Health Promotion partnership as a whole?

- **The partnership is achieving its aims and objectives**

strongly agree	agree	disagree	strongly disagree

Please add below any comments on the performance of the partnership. Thank you for your help.







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